

# 1. Frequency Stability

## 1.1 B2\_1.4MHz

### 1.1.1 Test Result

| Band: 2 / Bandwidth: 1.4MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 1850.7          | 6             | 0      | 20         | 3.3           | -11.716          | -0.0063               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -27.852          | -0.0150               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | 9.313            | 0.0050                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -20.528          | -0.0111               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -14.977          | -0.0081               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -46.935          | -0.0254               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -28.353          | -0.0153               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -9.212           | -0.0050               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -39.210          | -0.0212               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -22.130          | -0.0120               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -35.377          | -0.0191               | -2.5 to 2.5 | Pass    |
|                             | 1880            | 6             | 0      | 20         | 3.3           | -33.131          | -0.0176               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -21.958          | -0.0117               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -29.182          | -0.0155               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -50.397          | -0.0268               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -48.251          | -0.0257               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -40.312          | -0.0214               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -31.486          | -0.0167               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -42.815          | -0.0228               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -40.669          | -0.0216               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -32.330          | -0.0172               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -24.920          | -0.0133               | -2.5 to 2.5 | Pass    |
|                             | 1909.3          | 6             | 0      | 20         | 3.3           | 0.229            | 0.0001                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -48.923          | -0.0256               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -22.573          | -0.0118               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -36.778          | -0.0193               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -30.041          | -0.0157               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -22.917          | -0.0120               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -16.623          | -0.0087               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -8.540           | -0.0045               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -2.403           | -0.0013               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -11.201          | -0.0059               | -2.5 to 2.5 | Pass    |
| 16QAM                       | 1850.7          | 6             | 0      | 20         | 3.3           | -15.478          | -0.0084               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -37.050          | -0.0200               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -26.922          | -0.0145               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | 2.947            | 0.0016                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -17.810          | -0.0096               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -34.089          | -0.0184               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -15.607          | -0.0084               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -19.898          | -0.0108               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -34.690          | -0.0187               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -2.947           | -0.0016               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -15.950          | -0.0086               | -2.5 to 2.5 | Pass    |
|                             | 1880            | 6             | 0      | 20         | 3.3           | -28.811          | -0.0153               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -28.052          | -0.0149               | -2.5 to 2.5 | Pass    |

|  |        |   |   |     |     |         |         |             |      |
|--|--------|---|---|-----|-----|---------|---------|-------------|------|
|  |        |   |   |     | 4.2 | -21.601 | -0.0115 | -2.5 to 2.5 | Pass |
|  |        |   |   | -30 | 3.6 | -27.609 | -0.0147 | -2.5 to 2.5 | Pass |
|  |        |   |   | -20 | 3.6 | -1.917  | -0.0010 | -2.5 to 2.5 | Pass |
|  |        |   |   | -10 | 3.6 | -35.305 | -0.0188 | -2.5 to 2.5 | Pass |
|  |        |   |   | 0   | 3.6 | -36.879 | -0.0196 | -2.5 to 2.5 | Pass |
|  |        |   |   | 10  | 3.6 | -8.254  | -0.0044 | -2.5 to 2.5 | Pass |
|  |        |   |   | 30  | 3.6 | -29.426 | -0.0157 | -2.5 to 2.5 | Pass |
|  |        |   |   | 40  | 3.6 | -43.445 | -0.0231 | -2.5 to 2.5 | Pass |
|  |        |   |   | 50  | 3.6 | -7.353  | -0.0039 | -2.5 to 2.5 | Pass |
|  | 1909.3 | 6 | 0 | 20  | 3.3 | -45.161 | -0.0237 | -2.5 to 2.5 | Pass |
|  |        |   |   |     | 3.6 | -26.321 | -0.0138 | -2.5 to 2.5 | Pass |
|  |        |   |   |     | 4.2 | -8.512  | -0.0045 | -2.5 to 2.5 | Pass |
|  |        |   |   | -30 | 3.6 | -34.747 | -0.0182 | -2.5 to 2.5 | Pass |
|  |        |   |   | -20 | 3.6 | -8.812  | -0.0046 | -2.5 to 2.5 | Pass |
|  |        |   |   | -10 | 3.6 | -38.280 | -0.0200 | -2.5 to 2.5 | Pass |
|  |        |   |   | 0   | 3.6 | -39.625 | -0.0208 | -2.5 to 2.5 | Pass |
|  |        |   |   | 10  | 3.6 | -8.068  | -0.0042 | -2.5 to 2.5 | Pass |
|  |        |   |   | 30  | 3.6 | -32.330 | -0.0169 | -2.5 to 2.5 | Pass |
|  |        |   |   | 40  | 3.6 | -29.154 | -0.0153 | -2.5 to 2.5 | Pass |
|  |        |   |   | 50  | 3.6 | -51.026 | -0.0267 | -2.5 to 2.5 | Pass |

## 1.2 B2\_3MHz

### 1.2.1 Test Result

| Band: 2 / Bandwidth: 3MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 1851.5          | 15            | 0      | 20         | 3.3           | 15.635           | 0.0084                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -1.831           | -0.0010               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -28.253          | -0.0153               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -12.603          | -0.0068               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -29.597          | -0.0160               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -19.984          | -0.0108               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -3.490           | -0.0019               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -15.821          | -0.0085               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -11.687          | -0.0063               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -11.745          | -0.0063               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -8.769           | -0.0047               | -2.5 to 2.5 | Pass    |
|                           | 1880            | 15            | 0      | 20         | 3.3           | -16.565          | -0.0088               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -36.678          | -0.0195               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -11.315          | -0.0060               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -35.234          | -0.0187               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -30.985          | -0.0165               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -39.997          | -0.0213               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -19.283          | -0.0103               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -41.456          | -0.0221               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -31.643          | -0.0168               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -22.516          | -0.0120               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -15.235          | -0.0081               | -2.5 to 2.5 | Pass    |
|                           | 1908.5          | 15            | 0      | 20         | 3.3           | -13.862          | -0.0073               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -21.343          | -0.0112               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -37.451          | -0.0196               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -16.809          | -0.0088               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -14.577          | -0.0076               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
| 16QAM | 1851.5 | 15 | 0 | -10 | 3.6 | -35.162 | -0.0184 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -24.605 | -0.0129 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -2.933  | -0.0015 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -17.767 | -0.0093 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -42.443 | -0.0222 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -33.860 | -0.0177 | -2.5 to 2.5 | Pass |
|       | 1880   | 15 | 0 | 20  | 3.3 | -15.121 | -0.0082 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -24.118 | -0.0130 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -49.911 | -0.0270 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -27.523 | -0.0149 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -27.480 | -0.0148 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -16.336 | -0.0088 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -21.043 | -0.0114 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -34.304 | -0.0185 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -18.339 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -50.869 | -0.0275 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -19.670 | -0.0106 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | -42.343 | -0.0225 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -27.165 | -0.0144 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -41.270 | -0.0220 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -4.377  | -0.0023 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -24.390 | -0.0130 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -43.101 | -0.0229 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -23.046 | -0.0123 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -39.110 | -0.0208 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 6.108   | 0.0032  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -6.194  | -0.0033 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -24.548 | -0.0131 | -2.5 to 2.5 | Pass |
|       | 1908.5 | 15 | 0 | 20  | 3.3 | -0.887  | -0.0005 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -24.133 | -0.0126 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -11.301 | -0.0059 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -30.727 | -0.0161 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -50.840 | -0.0266 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -19.054 | -0.0100 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -37.594 | -0.0197 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -4.964  | -0.0026 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -22.345 | -0.0117 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -40.069 | -0.0210 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -6.666  | -0.0035 | -2.5 to 2.5 | Pass |

### 1.3 B2\_5MHz

#### 1.3.1 Test Result

| Band: 2 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 1852.5          | 25            | 0      | 20         | 3.27          | 15.221           | 0.0082                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.85          | 17.467           | 0.0094                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.43          | 12.059           | 0.0065                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.3           | 5.050            | 0.0027                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -12.603          | -0.0068               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 4.2           | -27.967          | -0.0151               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -48.237          | -0.0260               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -3.991           | -0.0022               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
|       |        |    |   | 30  | 3.6 | -23.217 | -0.0125 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -21.601 | -0.0117 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -25.234 | -0.0136 | -2.5 to 2.5 | Pass |
|       | 1880   | 25 | 0 | 20  | 3.6 | 7.639   | 0.0041  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 7.553   | 0.0040  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 1.459   | 0.0008  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.3 | -2.375  | -0.0013 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -11.487 | -0.0061 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 4.2 | -19.140 | -0.0102 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -28.024 | -0.0149 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -38.710 | -0.0206 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -46.577 | -0.0248 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -18.611 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -30.570 | -0.0163 | -2.5 to 2.5 | Pass |
|       | 1907.5 | 25 | 0 | 20  | 3.6 | -1.445  | -0.0008 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -3.076  | -0.0016 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -11.044 | -0.0058 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.3 | -20.041 | -0.0105 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -29.225 | -0.0153 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 4.2 | -41.070 | -0.0215 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -4.263  | -0.0022 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -15.836 | -0.0083 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -29.826 | -0.0156 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -42.186 | -0.0221 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -7.052  | -0.0037 | -2.5 to 2.5 | Pass |
| 16QAM | 1852.5 | 25 | 0 | 20  | 3.6 | -47.936 | -0.0259 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -5.908  | -0.0032 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -24.261 | -0.0131 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.3 | -22.702 | -0.0123 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -30.313 | -0.0164 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 4.2 | -44.045 | -0.0238 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -11.430 | -0.0062 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -24.290 | -0.0131 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -37.479 | -0.0202 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -0.701  | -0.0004 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -13.804 | -0.0075 | -2.5 to 2.5 | Pass |
|       | 1880   | 25 | 0 | 20  | 3.6 | -43.459 | -0.0231 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -46.349 | -0.0247 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 0.973   | 0.0005  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.3 | -6.280  | -0.0033 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -11.859 | -0.0063 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 4.2 | -18.253 | -0.0097 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -24.991 | -0.0133 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -31.071 | -0.0165 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -35.648 | -0.0190 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -41.041 | -0.0218 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -48.165 | -0.0256 | -2.5 to 2.5 | Pass |
|       | 1907.5 | 25 | 0 | 20  | 3.6 | -21.501 | -0.0113 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -32.473 | -0.0170 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 5.164   | 0.0027  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.3 | -3.891  | -0.0020 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -12.188 | -0.0064 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 4.2 | -24.848 | -0.0130 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -34.175 | -0.0179 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -46.549 | -0.0244 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -5.436  | -0.0028 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -14.834 | -0.0078 | -2.5 to 2.5 | Pass |

|  |  |  |  |    |     |         |         |             |      |
|--|--|--|--|----|-----|---------|---------|-------------|------|
|  |  |  |  | 50 | 3.6 | -22.373 | -0.0117 | -2.5 to 2.5 | Pass |
|--|--|--|--|----|-----|---------|---------|-------------|------|

## 1.4 B2\_10MHz

### 1.4.1 Test Result

| Band: 2 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1855            | 50            | 0      | 20         | 3.27          | 16.780           | 0.0090                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.85          | 18.568           | 0.0100                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.43          | 7.238            | 0.0039                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.3           | -10.157          | -0.0055               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -27.123          | -0.0146               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 4.2           | -45.505          | -0.0245               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -30.298          | -0.0163               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -6.781           | -0.0037               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -7.954           | -0.0043               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -29.826          | -0.0161               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -15.178          | -0.0082               | -2.5 to 2.5 | Pass    |
|                            | 1880            | 50            | 0      | 20         | 3.6           | 14.291           | 0.0076                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 10.114           | 0.0054                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 3.791            | 0.0020                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.3           | -3.719           | -0.0020               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -9.198           | -0.0049               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 4.2           | -17.581          | -0.0094               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -26.436          | -0.0141               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -34.962          | -0.0186               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -41.842          | -0.0223               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -10.271          | -0.0055               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -10.557          | -0.0056               | -2.5 to 2.5 | Pass    |
|                            | 1905            | 50            | 0      | 20         | 3.6           | 8.111            | 0.0043                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 8.097            | 0.0043                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 1.817            | 0.0010                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.3           | -6.766           | -0.0036               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -18.110          | -0.0095               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 4.2           | -31.028          | -0.0163               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -43.559          | -0.0229               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -48.666          | -0.0255               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -15.392          | -0.0081               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -26.350          | -0.0138               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -33.975          | -0.0178               | -2.5 to 2.5 | Pass    |
| 16QAM                      | 1855            | 50            | 0      | 20         | 3.6           | -38.080          | -0.0205               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -6.108           | -0.0033               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -18.997          | -0.0102               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.3           | -29.511          | -0.0159               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -43.187          | -0.0233               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 4.2           | -40.913          | -0.0221               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -1.731           | -0.0009               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -10.772          | -0.0058               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -20.270          | -0.0109               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -30.527          | -0.0165               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -43.345          | -0.0234               | -2.5 to 2.5 | Pass    |
|                            | 1880            | 50            | 0      | 20         | 3.6           | -18.225          | -0.0097               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -25.363          | -0.0135               | -2.5 to 2.5 | Pass    |

|  |      |    |   |     |     |         |         |             |      |
|--|------|----|---|-----|-----|---------|---------|-------------|------|
|  |      |    |   |     | 3.6 | -28.009 | -0.0149 | -2.5 to 2.5 | Pass |
|  |      |    |   | -30 | 3.3 | -33.503 | -0.0178 | -2.5 to 2.5 | Pass |
|  |      |    |   | -20 | 3.6 | -34.504 | -0.0184 | -2.5 to 2.5 | Pass |
|  |      |    |   | -10 | 4.2 | -38.738 | -0.0206 | -2.5 to 2.5 | Pass |
|  |      |    |   | 0   | 3.6 | -40.040 | -0.0213 | -2.5 to 2.5 | Pass |
|  |      |    |   | 10  | 3.6 | -16.651 | -0.0089 | -2.5 to 2.5 | Pass |
|  |      |    |   | 30  | 3.6 | 0.558   | 0.0003  | -2.5 to 2.5 | Pass |
|  |      |    |   | 40  | 3.6 | -3.233  | -0.0017 | -2.5 to 2.5 | Pass |
|  |      |    |   | 50  | 3.6 | -8.469  | -0.0045 | -2.5 to 2.5 | Pass |
|  | 1905 | 50 | 0 | 20  | 3.6 | -0.129  | -0.0001 | -2.5 to 2.5 | Pass |
|  |      |    |   |     | 3.6 | -7.811  | -0.0041 | -2.5 to 2.5 | Pass |
|  |      |    |   |     | 3.6 | -12.589 | -0.0066 | -2.5 to 2.5 | Pass |
|  |      |    |   | -30 | 3.3 | -17.853 | -0.0094 | -2.5 to 2.5 | Pass |
|  |      |    |   | -20 | 3.6 | -23.875 | -0.0125 | -2.5 to 2.5 | Pass |
|  |      |    |   | -10 | 4.2 | -28.510 | -0.0150 | -2.5 to 2.5 | Pass |
|  |      |    |   | 0   | 3.6 | -32.530 | -0.0171 | -2.5 to 2.5 | Pass |
|  |      |    |   | 10  | 3.6 | -37.508 | -0.0197 | -2.5 to 2.5 | Pass |
|  |      |    |   | 30  | 3.6 | -41.099 | -0.0216 | -2.5 to 2.5 | Pass |
|  |      |    |   | 40  | 3.6 | -47.779 | -0.0251 | -2.5 to 2.5 | Pass |
|  |      |    |   | 50  | 3.6 | -40.755 | -0.0214 | -2.5 to 2.5 | Pass |

## 1.5 B2\_15MHz

### 1.5.1 Test Result

| Band: 2 / Bandwidth: 15MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1857.5          | 75            | 0      | 20         | 3.3           | 34.933           | 0.0188                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 37.665           | 0.0203                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 31.271           | 0.0168                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 19.898           | 0.0107                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 7.739            | 0.0042                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -5.736           | -0.0031               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -18.382          | -0.0099               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -30.627          | -0.0165               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -39.754          | -0.0214               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -7.696           | -0.0041               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -20.256          | -0.0109               | -2.5 to 2.5 | Pass    |
|                            | 1880            | 75            | 0      | 20         | 3.3           | 8.254            | 0.0044                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 3.591            | 0.0019                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -1.588           | -0.0008               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -6.595           | -0.0035               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -10.586          | -0.0056               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -17.939          | -0.0095               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -21.958          | -0.0117               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -28.052          | -0.0149               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -35.734          | -0.0190               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -16.708          | -0.0089               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -12.503          | -0.0067               | -2.5 to 2.5 | Pass    |
|                            | 1902.5          | 75            | 0      | 20         | 3.3           | 16.937           | 0.0089                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 14.920           | 0.0078                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 8.240            | 0.0043                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 2.918            | 0.0015                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -2.346           | -0.0012               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
|       |        |    |   | -10 | 3.6 | -11.945 | -0.0063 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -19.784 | -0.0104 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -29.368 | -0.0154 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -36.650 | -0.0193 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -46.105 | -0.0242 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -5.150  | -0.0027 | -2.5 to 2.5 | Pass |
| 16QAM | 1857.5 | 75 | 0 | 20  | 3.3 | -32.415 | -0.0175 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -41.857 | -0.0225 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -12.975 | -0.0070 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -19.097 | -0.0103 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -26.107 | -0.0141 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -29.268 | -0.0158 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -33.345 | -0.0180 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -38.137 | -0.0205 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -29.211 | -0.0157 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -0.515  | -0.0003 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -5.479  | -0.0029 | -2.5 to 2.5 | Pass |
|       | 1880   | 75 | 0 | 20  | 3.3 | -19.441 | -0.0103 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -25.449 | -0.0135 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -27.194 | -0.0145 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -30.727 | -0.0163 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -34.161 | -0.0182 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -38.724 | -0.0206 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -42.114 | -0.0224 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -45.805 | -0.0244 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -48.194 | -0.0256 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 9.413   | 0.0050  | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 7.138   | 0.0038  | -2.5 to 2.5 | Pass |
|       | 1902.5 | 75 | 0 | 20  | 3.3 | -10.729 | -0.0056 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -15.907 | -0.0084 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -17.867 | -0.0094 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -22.001 | -0.0116 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -27.523 | -0.0145 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -33.789 | -0.0178 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -34.132 | -0.0179 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -38.638 | -0.0203 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -41.699 | -0.0219 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -46.306 | -0.0243 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -28.567 | -0.0150 | -2.5 to 2.5 | Pass |

## 1.6 B2\_20MHz

### 1.6.1 Test Result

| Band: 2 / Bandwidth: 20MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1860            | 100           | 0      | 20         | 3.3           | 25.706           | 0.0138                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 22.960           | 0.0123                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 11.730           | 0.0063                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 0.916            | 0.0005                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -10.257          | -0.0055               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -22.073          | -0.0119               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -29.440          | -0.0158               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -37.694          | -0.0203               | -2.5 to 2.5 | Pass    |

|       |      |     |   |     |     |         |         |             |      |
|-------|------|-----|---|-----|-----|---------|---------|-------------|------|
|       | 1880 | 100 | 0 | 30  | 3.6 | -20.957 | -0.0113 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -4.063  | -0.0022 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -13.804 | -0.0074 | -2.5 to 2.5 | Pass |
|       |      |     |   | 20  | 3.3 | 5.007   | 0.0027  | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | 3.691   | 0.0020  | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | 0.072   | 0.0000  | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -4.721  | -0.0025 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -10.185 | -0.0054 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -13.647 | -0.0073 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -18.940 | -0.0101 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -21.830 | -0.0116 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -25.220 | -0.0134 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -30.527 | -0.0162 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -33.031 | -0.0176 | -2.5 to 2.5 | Pass |
|       | 1900 | 100 | 0 | 20  | 3.3 | 8.698   | 0.0046  | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | 5.908   | 0.0031  | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | 1.659   | 0.0009  | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -0.973  | -0.0005 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -4.306  | -0.0023 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -7.682  | -0.0040 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -8.898  | -0.0047 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -12.717 | -0.0067 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -17.109 | -0.0090 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -18.039 | -0.0095 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -21.772 | -0.0115 | -2.5 to 2.5 | Pass |
|       |      |     |   | 20  | 3.3 | -20.156 | -0.0108 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -24.219 | -0.0130 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -27.924 | -0.0150 | -2.5 to 2.5 | Pass |
| 16QAM | 1860 | 100 | 0 | -30 | 3.6 | -32.744 | -0.0176 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -34.189 | -0.0184 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -37.351 | -0.0201 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -42.000 | -0.0226 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -44.260 | -0.0238 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -48.952 | -0.0263 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -50.998 | -0.0274 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -53.144 | -0.0286 | -2.5 to 2.5 | Pass |
|       | 1880 | 100 | 0 | 20  | 3.3 | -38.080 | -0.0203 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -39.868 | -0.0212 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -40.026 | -0.0213 | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -44.932 | -0.0239 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -46.692 | -0.0248 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -48.265 | -0.0257 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -49.896 | -0.0265 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -44.189 | -0.0235 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | 10.285  | 0.0055  | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | 9.155   | 0.0049  | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | 8.783   | 0.0047  | -2.5 to 2.5 | Pass |
|       | 1900 | 100 | 0 | 20  | 3.3 | -24.490 | -0.0129 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -23.975 | -0.0126 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -25.635 | -0.0135 | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -26.150 | -0.0138 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -26.436 | -0.0139 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -28.224 | -0.0149 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -29.669 | -0.0156 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -31.157 | -0.0164 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -32.558 | -0.0171 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -35.019 | -0.0184 | -2.5 to 2.5 | Pass |

|  |  |  |  |    |     |         |         |             |      |
|--|--|--|--|----|-----|---------|---------|-------------|------|
|  |  |  |  | 50 | 3.6 | -36.678 | -0.0193 | -2.5 to 2.5 | Pass |
|--|--|--|--|----|-----|---------|---------|-------------|------|

## 2. Frequency Stability

### 2.1 B38\_5MHz

#### 2.1.1 Test Result

| Band: 38 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 2572.5          | 25            | 0      | 20         | 3.3           | -18.368          | -0.0071               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -30.756          | -0.0120               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -41.142          | -0.0160               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -54.231          | -0.0211               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -35.577          | -0.0138               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -29.082          | -0.0113               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -31.829          | -0.0124               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -35.033          | -0.0136               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -38.967          | -0.0151               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -39.425          | -0.0153               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -39.268          | -0.0153               | -2.5 to 2.5 | Pass    |
|                            | 2595            | 25            | 0      | 20         | 3.3           | -36.507          | -0.0141               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -42.415          | -0.0163               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -49.911          | -0.0192               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -15.450          | -0.0060               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 3.920            | 0.0015                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 0.529            | 0.0002                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -0.443           | -0.0002               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -2.418           | -0.0009               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -5.407           | -0.0021               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -5.536           | -0.0021               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -5.980           | -0.0023               | -2.5 to 2.5 | Pass    |
|                            | 2617.5          | 25            | 0      | 20         | 3.3           | 8.068            | 0.0031                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 14.992           | 0.0057                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 4.435            | 0.0017                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 5.937            | 0.0023                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 1.316            | 0.0005                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -4.821           | -0.0018               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -7.625           | -0.0029               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -7.138           | -0.0027               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -3.090           | -0.0012               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -2.432           | -0.0009               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -11.559          | -0.0044               | -2.5 to 2.5 | Pass    |
| 16QAM                      | 2572.5          | 25            | 0      | 20         | 3.3           | -38.438          | -0.0149               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -39.697          | -0.0154               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -38.123          | -0.0148               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -43.345          | -0.0168               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -33.903          | -0.0132               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -43.802          | -0.0170               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -47.622          | -0.0185               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -49.739          | -0.0193               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -51.827          | -0.0201               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -4.764           | -0.0019               | -2.5 to 2.5 | Pass    |

|  |        |     |         |         |             |         |         |             |             |
|--|--------|-----|---------|---------|-------------|---------|---------|-------------|-------------|
|  | 2595   | 25  | 0       | 50      | 3.6         | -15.664 | -0.0061 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 20      | 3.3         | -5.879  | -0.0023 | -2.5 to 2.5 | Pass        |
|  |        |     |         |         | 3.6         | -6.523  | -0.0025 | -2.5 to 2.5 | Pass        |
|  |        |     |         |         | 4.2         | -8.640  | -0.0033 | -2.5 to 2.5 | Pass        |
|  |        |     |         |         | -30         | 3.6     | -8.297  | -0.0032     | -2.5 to 2.5 |
|  |        |     |         | -20     | 3.6         | -9.327  | -0.0036 | -2.5 to 2.5 | Pass        |
|  |        |     |         | -10     | 3.6         | -9.656  | -0.0037 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 0       | 3.6         | -21.386 | -0.0082 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 10      | 3.6         | -17.738 | -0.0068 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 30      | 3.6         | -27.552 | -0.0106 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 40      | 3.6         | -28.481 | -0.0110 | -2.5 to 2.5 | Pass        |
|  | 50     | 3.6 | -30.026 | -0.0116 | -2.5 to 2.5 | Pass    |         |             |             |
|  | 2617.5 | 25  | 0       | 20      | 3.3         | -6.394  | -0.0024 | -2.5 to 2.5 | Pass        |
|  |        |     |         |         | 3.6         | -3.891  | -0.0015 | -2.5 to 2.5 | Pass        |
|  |        |     |         |         | 4.2         | -4.764  | -0.0018 | -2.5 to 2.5 | Pass        |
|  |        |     |         | -30     | 3.6         | 1.888   | 0.0007  | -2.5 to 2.5 | Pass        |
|  |        |     |         | -20     | 3.6         | -5.894  | -0.0023 | -2.5 to 2.5 | Pass        |
|  |        |     |         | -10     | 3.6         | -6.495  | -0.0025 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 0       | 3.6         | -4.292  | -0.0016 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 10      | 3.6         | -7.195  | -0.0027 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 30      | 3.6         | -7.410  | -0.0028 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 40      | 3.6         | -3.762  | -0.0014 | -2.5 to 2.5 | Pass        |
|  |        |     |         | 50      | 3.6         | -7.339  | -0.0028 | -2.5 to 2.5 | Pass        |

## 2.2 B38\_10MHz

### 2.2.1 Test Result

| Band: 38 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2575            | 50            | 0      | 20         | 3.3           | -23.146          | -0.0090               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -50.354          | -0.0196               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -2.961           | -0.0011               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -2.232           | -0.0009               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -15.635          | -0.0061               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -18.725          | -0.0073               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -18.682          | -0.0073               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -12.488          | -0.0048               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -15.206          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -22.116          | -0.0086               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -12.846          | -0.0050               | -2.5 to 2.5 | Pass    |
|                             | 2595            | 50            | 0      | 20         | 3.3           | -0.629           | -0.0002               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -8.526           | -0.0033               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -11.215          | -0.0043               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -17.867          | -0.0069               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -21.029          | -0.0081               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -16.265          | -0.0063               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -17.924          | -0.0069               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -17.195          | -0.0066               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -24.490          | -0.0094               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -18.497          | -0.0071               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -15.349          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             | 2615            | 50            | 0      | 20         | 3.3           | -15.578          | -0.0060               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -19.841          | -0.0076               | -2.5 to 2.5 | Pass    |

|       |      |    |   |     |     |         |         |             |      |
|-------|------|----|---|-----|-----|---------|---------|-------------|------|
|       |      |    |   |     | 4.2 | -28.281 | -0.0108 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | -26.865 | -0.0103 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | -33.531 | -0.0128 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | -33.374 | -0.0128 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | -22.860 | -0.0087 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | -28.410 | -0.0109 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | -26.479 | -0.0101 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | -26.007 | -0.0099 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -28.696 | -0.0110 | -2.5 to 2.5 | Pass |
| 16QAM | 2575 | 50 | 0 | 20  | 3.3 | -14.935 | -0.0058 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | -17.266 | -0.0067 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | -20.499 | -0.0080 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | -14.806 | -0.0057 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | -24.176 | -0.0094 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | -22.545 | -0.0088 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | -25.234 | -0.0098 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | -31.857 | -0.0124 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | -43.902 | -0.0170 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | -39.024 | -0.0152 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -49.610 | -0.0193 | -2.5 to 2.5 | Pass |
|       | 2595 | 50 | 0 | 20  | 3.3 | -16.994 | -0.0065 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | -12.431 | -0.0048 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | -10.600 | -0.0041 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | -12.546 | -0.0048 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | -15.721 | -0.0061 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | -23.274 | -0.0090 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | -21.930 | -0.0085 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | -24.204 | -0.0093 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | -29.411 | -0.0113 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | -33.517 | -0.0129 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -31.972 | -0.0123 | -2.5 to 2.5 | Pass |
|       | 2615 | 50 | 0 | 20  | 3.3 | -31.328 | -0.0120 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | -28.510 | -0.0109 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | -30.770 | -0.0118 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | -23.818 | -0.0091 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | -32.616 | -0.0125 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | -37.322 | -0.0143 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | -38.781 | -0.0148 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | -34.447 | -0.0132 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | -43.001 | -0.0164 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | -43.230 | -0.0165 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -36.178 | -0.0138 | -2.5 to 2.5 | Pass |

## 2.3 B38\_15MHz

### 2.3.1 Test Result

| Band: 38 / Bandwidth: 15MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2577.5          | 75            | 0      | 20         | 3.3           | -4.921           | -0.0019               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -23.847          | -0.0093               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -33.760          | -0.0131               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -36.335          | -0.0141               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -36.135          | -0.0140               | -2.5 to 2.5 | Pass    |

|      |       |         |         |        |         |         |         |             |             |         |
|------|-------|---------|---------|--------|---------|---------|---------|-------------|-------------|---------|
|      |       |         |         | -10    | 3.6     | -34.890 | -0.0135 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 0      | 3.6     | -27.523 | -0.0107 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 10     | 3.6     | -38.753 | -0.0150 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 30     | 3.6     | -35.033 | -0.0136 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 40     | 3.6     | -36.292 | -0.0141 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 50     | 3.6     | -24.004 | -0.0093 | -2.5 to 2.5 | Pass        |         |
|      | 2595  | 75      | 0       | 20     | 3.3     | -17.052 | -0.0066 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         |        | 3.6     | -25.091 | -0.0097 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         |        | 4.2     | -33.045 | -0.0127 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -30    | 3.6     | -31.257 | -0.0120 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -20    | 3.6     | -25.377 | -0.0098 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -10    | 3.6     | -27.609 | -0.0106 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 0      | 3.6     | -27.237 | -0.0105 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 10     | 3.6     | -26.708 | -0.0103 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 30     | 3.6     | -26.507 | -0.0102 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 40     | 3.6     | -34.003 | -0.0131 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 50     | 3.6     | -25.163 | -0.0097 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 2612.5 | 75      | 0       | 20      | 3.3         | -12.231     | -0.0047 |
|      | 3.6   | -14.048 | -0.0054 |        |         |         |         | -2.5 to 2.5 | Pass        |         |
|      | 4.2   | -15.049 | -0.0058 |        |         |         |         | -2.5 to 2.5 | Pass        |         |
|      | -30   | 3.6     | -19.712 |        |         |         | -0.0075 | -2.5 to 2.5 | Pass        |         |
|      | -20   | 3.6     | -19.712 |        |         |         | -0.0075 | -2.5 to 2.5 | Pass        |         |
|      | -10   | 3.6     | -19.941 |        |         |         | -0.0076 | -2.5 to 2.5 | Pass        |         |
|      | 0     | 3.6     | -20.256 |        |         |         | -0.0078 | -2.5 to 2.5 | Pass        |         |
|      | 10    | 3.6     | -19.312 |        |         |         | -0.0074 | -2.5 to 2.5 | Pass        |         |
|      | 30    | 3.6     | -16.150 |        |         |         | -0.0062 | -2.5 to 2.5 | Pass        |         |
|      | 40    | 3.6     | -3.004  |        |         |         | -0.0011 | -2.5 to 2.5 | Pass        |         |
|      | 50    | 3.6     | -4.463  |        |         |         | -0.0017 | -2.5 to 2.5 | Pass        |         |
|      | 16QAM | 2577.5  | 75      |        |         |         | 0       | 20          | 3.3         | -28.396 |
|      |       |         |         | 3.6    | -23.260 | -0.0090 |         |             | -2.5 to 2.5 | Pass    |
|      |       |         |         | 4.2    | -20.199 | -0.0078 |         |             | -2.5 to 2.5 | Pass    |
|      |       |         |         | -30    | 3.6     | -30.713 |         | -0.0119     | -2.5 to 2.5 | Pass    |
|      |       |         |         | -20    | 3.6     | -28.424 |         | -0.0110     | -2.5 to 2.5 | Pass    |
|      |       |         |         | -10    | 3.6     | -36.278 |         | -0.0141     | -2.5 to 2.5 | Pass    |
|      |       |         |         | 0      | 3.6     | -29.955 |         | -0.0116     | -2.5 to 2.5 | Pass    |
|      |       |         |         | 10     | 3.6     | -41.814 |         | -0.0162     | -2.5 to 2.5 | Pass    |
| 30   |       |         |         | 3.6    | -45.991 | -0.0178 |         | -2.5 to 2.5 | Pass        |         |
| 40   |       |         |         | 3.6    | -40.383 | -0.0157 |         | -2.5 to 2.5 | Pass        |         |
| 50   |       |         |         | 3.6    | -46.992 | -0.0182 |         | -2.5 to 2.5 | Pass        |         |
| 2595 |       |         |         | 75     | 0       | 20      |         | 3.3         | -21.300     | -0.0082 |
|      |       | 3.6     | -20.814 |        |         |         | -0.0080 | -2.5 to 2.5 | Pass        |         |
|      |       | 4.2     | -25.592 |        |         |         | -0.0099 | -2.5 to 2.5 | Pass        |         |
|      |       | -30     | 3.6     |        |         | -18.911 | -0.0073 | -2.5 to 2.5 | Pass        |         |
|      |       | -20     | 3.6     |        |         | -29.883 | -0.0115 | -2.5 to 2.5 | Pass        |         |
|      |       | -10     | 3.6     |        |         | -28.739 | -0.0111 | -2.5 to 2.5 | Pass        |         |
|      |       | 0       | 3.6     |        |         | -22.931 | -0.0088 | -2.5 to 2.5 | Pass        |         |
|      |       | 10      | 3.6     |        |         | -35.477 | -0.0137 | -2.5 to 2.5 | Pass        |         |
|      |       | 30      | 3.6     |        |         | -30.642 | -0.0118 | -2.5 to 2.5 | Pass        |         |
|      |       | 40      | 3.6     |        |         | -29.583 | -0.0114 | -2.5 to 2.5 | Pass        |         |
|      |       | 50      | 3.6     |        |         | -40.870 | -0.0157 | -2.5 to 2.5 | Pass        |         |
|      |       | 2612.5  | 75      |        |         | 0       | 20      | 3.3         | -11.015     | -0.0042 |
| 3.6  |       |         |         | -1.130 | -0.0004 |         |         | -2.5 to 2.5 | Pass        |         |
| 4.2  |       |         |         | -9.284 | -0.0036 |         |         | -2.5 to 2.5 | Pass        |         |
| -30  |       |         |         | 3.6    | -10.228 |         | -0.0039 | -2.5 to 2.5 | Pass        |         |
| -20  |       |         |         | 3.6    | -11.344 |         | -0.0043 | -2.5 to 2.5 | Pass        |         |
| -10  |       |         |         | 3.6    | -3.161  |         | -0.0012 | -2.5 to 2.5 | Pass        |         |
| 0    |       |         |         | 3.6    | -3.419  |         | -0.0013 | -2.5 to 2.5 | Pass        |         |

|  |  |  |  |    |     |         |         |             |      |
|--|--|--|--|----|-----|---------|---------|-------------|------|
|  |  |  |  | 10 | 3.6 | -17.495 | -0.0067 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30 | 3.6 | -5.579  | -0.0021 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40 | 3.6 | -10.057 | -0.0038 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50 | 3.6 | -11.873 | -0.0045 | -2.5 to 2.5 | Pass |

## 2.4 B38\_20MHz

### 2.4.1 Test Result

| Band: 38 / Bandwidth: 20MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2580            | 100           | 0      | 20         | 3.3           | 17.996           | 0.0070                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -2.203           | -0.0009               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -5.794           | -0.0022               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -8.411           | -0.0033               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | 7.524            | 0.0029                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | 3.176            | 0.0012                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -6.638           | -0.0026               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | 1.116            | 0.0004                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | 1.459            | 0.0006                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | 4.077            | 0.0016                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | 7.768            | 0.0030                | -2.5 to 2.5 | Pass    |
|                             | 2595            | 100           | 0      | 20         | 3.3           | -28.911          | -0.0111               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -33.717          | -0.0130               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -35.734          | -0.0138               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -29.955          | -0.0115               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -40.483          | -0.0156               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -39.525          | -0.0152               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -38.323          | -0.0148               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -32.530          | -0.0125               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -31.886          | -0.0123               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -31.514          | -0.0121               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -32.158          | -0.0124               | -2.5 to 2.5 | Pass    |
|                             | 2610            | 100           | 0      | 20         | 3.3           | -26.393          | -0.0101               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -29.955          | -0.0115               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -30.928          | -0.0118               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -30.942          | -0.0119               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -31.772          | -0.0122               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -31.414          | -0.0120               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -27.652          | -0.0106               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -26.865          | -0.0103               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -38.981          | -0.0149               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -32.058          | -0.0123               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -33.531          | -0.0128               | -2.5 to 2.5 | Pass    |
| 16QAM                       | 2580            | 100           | 0      | 20         | 3.3           | -2.990           | -0.0012               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -2.875           | -0.0011               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | 4.535            | 0.0018                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -7.424           | -0.0029               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -4.206           | -0.0016               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -11.673          | -0.0045               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -13.590          | -0.0053               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -10.657          | -0.0041               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -9.298           | -0.0036               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -15.779          | -0.0061               | -2.5 to 2.5 | Pass    |

|  |      |     |   |     |     |         |         |             |      |
|--|------|-----|---|-----|-----|---------|---------|-------------|------|
|  | 2595 | 100 | 0 | 50  | 3.6 | -13.633 | -0.0053 | -2.5 to 2.5 | Pass |
|  |      |     |   | 20  | 3.3 | -35.648 | -0.0137 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 3.6 | -32.301 | -0.0124 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 4.2 | -33.674 | -0.0130 | -2.5 to 2.5 | Pass |
|  |      |     |   | -30 | 3.6 | -33.932 | -0.0131 | -2.5 to 2.5 | Pass |
|  |      |     |   | -20 | 3.6 | -28.610 | -0.0110 | -2.5 to 2.5 | Pass |
|  |      |     |   | -10 | 3.6 | -33.889 | -0.0131 | -2.5 to 2.5 | Pass |
|  |      |     |   | 0   | 3.6 | -35.419 | -0.0136 | -2.5 to 2.5 | Pass |
|  |      |     |   | 10  | 3.6 | -27.709 | -0.0107 | -2.5 to 2.5 | Pass |
|  |      |     |   | 30  | 3.6 | -33.145 | -0.0128 | -2.5 to 2.5 | Pass |
|  | 2610 | 100 | 0 | 40  | 3.6 | -33.689 | -0.0130 | -2.5 to 2.5 | Pass |
|  |      |     |   | 50  | 3.6 | -35.534 | -0.0137 | -2.5 to 2.5 | Pass |
|  |      |     |   | 20  | 3.3 | -20.213 | -0.0077 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 3.6 | -18.325 | -0.0070 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 4.2 | -18.697 | -0.0072 | -2.5 to 2.5 | Pass |
|  |      |     |   | -30 | 3.6 | -20.385 | -0.0078 | -2.5 to 2.5 | Pass |
|  |      |     |   | -20 | 3.6 | -20.914 | -0.0080 | -2.5 to 2.5 | Pass |
|  |      |     |   | -10 | 3.6 | -20.528 | -0.0079 | -2.5 to 2.5 | Pass |
|  |      |     |   | 0   | 3.6 | -26.050 | -0.0100 | -2.5 to 2.5 | Pass |
|  |      |     |   | 10  | 3.6 | -21.000 | -0.0080 | -2.5 to 2.5 | Pass |
|  |      |     |   | 30  | 3.6 | -21.086 | -0.0081 | -2.5 to 2.5 | Pass |
|  |      |     |   | 40  | 3.6 | -24.605 | -0.0094 | -2.5 to 2.5 | Pass |
|  |      |     |   | 50  | 3.6 | -27.552 | -0.0106 | -2.5 to 2.5 | Pass |

### 3. Frequency Stability

#### 3.1 B4\_1.4MHz

##### 3.1.1 Test Result

| Band: 4 / Bandwidth: 1.4MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 1710.7          | 6             | 0      | 20         | 3.3           | 7.310            | 0.0043                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -0.772           | -0.0005               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -6.881           | -0.0040               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -12.989          | -0.0076               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -21.915          | -0.0128               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -24.219          | -0.0142               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | 2.675            | 0.0016                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -1.674           | -0.0010               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -7.396           | -0.0043               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -12.016          | -0.0070               | -2.5 to 2.5 | Pass    |
|                             | 1732.5          | 6             | 0      | 50         | 3.6           | -18.168          | -0.0106               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 20         | 3.3           | 1.287            | 0.0007                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 0.944            | 0.0005                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | 0.672            | 0.0004                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -5.293           | -0.0031               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -6.795           | -0.0039               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -7.739           | -0.0045               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -8.411           | -0.0049               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -9.284           | -0.0054               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -10.257          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -12.059          | -0.0070               | -2.5 to 2.5 | Pass    |

|       |        |   |   |     |     |         |         |             |      |
|-------|--------|---|---|-----|-----|---------|---------|-------------|------|
|       | 1754.3 | 6 | 0 | 50  | 3.6 | -13.847 | -0.0080 | -2.5 to 2.5 | Pass |
|       |        |   |   | 20  | 3.3 | 0.501   | 0.0003  | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.6 | -10.343 | -0.0059 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.2 | -17.767 | -0.0101 | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.6 | -26.522 | -0.0151 | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.6 | -39.511 | -0.0225 | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.6 | -25.849 | -0.0147 | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.6 | -33.631 | -0.0192 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.6 | -45.147 | -0.0257 | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.6 | -4.263  | -0.0024 | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.6 | -10.514 | -0.0060 | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.6 | -20.270 | -0.0116 | -2.5 to 2.5 | Pass |
| 16QAM | 1710.7 | 6 | 0 | 20  | 3.3 | -20.843 | -0.0122 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.6 | -24.834 | -0.0145 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.2 | -30.556 | -0.0179 | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.6 | -31.343 | -0.0183 | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.6 | -33.488 | -0.0196 | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.6 | 12.932  | 0.0076  | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.6 | 12.875  | 0.0075  | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.6 | 14.119  | 0.0083  | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.6 | 14.262  | 0.0083  | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.6 | 11.973  | 0.0070  | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.6 | 10.257  | 0.0060  | -2.5 to 2.5 | Pass |
|       | 1732.5 | 6 | 0 | 20  | 3.3 | -15.593 | -0.0090 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.6 | -14.834 | -0.0086 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.2 | -13.947 | -0.0081 | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.6 | -13.132 | -0.0076 | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.6 | -13.032 | -0.0075 | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.6 | -11.687 | -0.0067 | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.6 | -13.719 | -0.0079 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.6 | -11.802 | -0.0068 | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.6 | -10.085 | -0.0058 | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.6 | -11.158 | -0.0064 | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.6 | -10.614 | -0.0061 | -2.5 to 2.5 | Pass |
|       | 1754.3 | 6 | 0 | 20  | 3.3 | -26.650 | -0.0152 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.6 | -30.069 | -0.0171 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.2 | -36.807 | -0.0210 | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.6 | 9.084   | 0.0052  | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.6 | 6.452   | 0.0037  | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.6 | 2.904   | 0.0017  | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.6 | 1.860   | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.6 | -1.802  | -0.0010 | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.6 | -3.490  | -0.0020 | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.6 | -5.078  | -0.0029 | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.6 | -6.409  | -0.0037 | -2.5 to 2.5 | Pass |

## 3.2 B4\_3MHz

### 3.2.1 Test Result

| Band: 4 / Bandwidth: 3MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 1711.5          | 15            | 0      | 20         | 3.3           | 5.293            | 0.0031                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -2.232           | -0.0013               | -2.5 to 2.5 | Pass    |

|       |        |       |         |             |             |         |         |             |      |
|-------|--------|-------|---------|-------------|-------------|---------|---------|-------------|------|
|       |        |       |         |             | 4.2         | -7.854  | -0.0046 | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | -19.970 | -0.0117 | -2.5 to 2.5 | Pass |
|       |        |       |         | -20         | 3.6         | -28.811 | -0.0168 | -2.5 to 2.5 | Pass |
|       |        |       |         | -10         | 3.6         | -1.373  | -0.0008 | -2.5 to 2.5 | Pass |
|       |        |       |         | 0           | 3.6         | -9.341  | -0.0055 | -2.5 to 2.5 | Pass |
|       |        |       |         | 10          | 3.6         | -17.109 | -0.0100 | -2.5 to 2.5 | Pass |
|       |        |       |         | 30          | 3.6         | -22.430 | -0.0131 | -2.5 to 2.5 | Pass |
|       |        |       |         | 40          | 3.6         | -29.497 | -0.0172 | -2.5 to 2.5 | Pass |
|       |        |       |         | 50          | 3.6         | -36.092 | -0.0211 | -2.5 to 2.5 | Pass |
|       | 1732.5 | 15    | 0       | 20          | 3.3         | 3.033   | 0.0018  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 3.6         | 2.217   | 0.0013  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 4.2         | -0.529  | -0.0003 | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | -4.964  | -0.0029 | -2.5 to 2.5 | Pass |
|       |        |       |         | -20         | 3.6         | -7.896  | -0.0046 | -2.5 to 2.5 | Pass |
|       |        |       |         | -10         | 3.6         | -10.700 | -0.0062 | -2.5 to 2.5 | Pass |
|       |        |       |         | 0           | 3.6         | -15.035 | -0.0087 | -2.5 to 2.5 | Pass |
|       |        |       |         | 10          | 3.6         | -15.635 | -0.0090 | -2.5 to 2.5 | Pass |
|       |        |       |         | 30          | 3.6         | -18.110 | -0.0105 | -2.5 to 2.5 | Pass |
|       | 40     | 3.6   | -21.100 | -0.0122     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50     | 3.6   | -19.770 | -0.0114     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 1753.5 | 15    | 0       | 20          | 3.3         | 11.230  | 0.0064  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 3.6         | 9.913   | 0.0057  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 4.2         | 8.097   | 0.0046  | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | 7.410   | 0.0042  | -2.5 to 2.5 | Pass |
|       |        |       |         | -20         | 3.6         | 7.467   | 0.0043  | -2.5 to 2.5 | Pass |
|       |        |       |         | -10         | 3.6         | 8.383   | 0.0048  | -2.5 to 2.5 | Pass |
|       |        |       |         | 0           | 3.6         | 7.668   | 0.0044  | -2.5 to 2.5 | Pass |
|       |        |       |         | 10          | 3.6         | 9.656   | 0.0055  | -2.5 to 2.5 | Pass |
|       |        |       |         | 30          | 3.6         | 9.198   | 0.0052  | -2.5 to 2.5 | Pass |
|       | 40     | 3.6   | 8.883   | 0.0051      | -2.5 to 2.5 | Pass    |         |             |      |
| 50    | 3.6    | 9.742 | 0.0056  | -2.5 to 2.5 | Pass        |         |         |             |      |
| 16QAM | 1711.5 | 15    | 0       | 20          | 3.3         | -2.489  | -0.0015 | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 3.6         | -10.071 | -0.0059 | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 4.2         | -13.418 | -0.0078 | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | -16.952 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |       |         | -20         | 3.6         | -22.087 | -0.0129 | -2.5 to 2.5 | Pass |
|       |        |       |         | -10         | 3.6         | -25.063 | -0.0146 | -2.5 to 2.5 | Pass |
|       |        |       |         | 0           | 3.6         | -26.708 | -0.0156 | -2.5 to 2.5 | Pass |
|       |        |       |         | 10          | 3.6         | -31.929 | -0.0187 | -2.5 to 2.5 | Pass |
|       |        |       |         | 30          | 3.6         | -33.102 | -0.0193 | -2.5 to 2.5 | Pass |
|       | 40     | 3.6   | -36.936 | -0.0216     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50     | 3.6   | -38.753 | -0.0226     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 1732.5 | 15    | 0       | 20          | 3.3         | -24.247 | -0.0140 | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 3.6         | -25.606 | -0.0148 | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 4.2         | -25.420 | -0.0147 | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | -25.907 | -0.0150 | -2.5 to 2.5 | Pass |
|       |        |       |         | -20         | 3.6         | -23.561 | -0.0136 | -2.5 to 2.5 | Pass |
|       |        |       |         | -10         | 3.6         | -25.706 | -0.0148 | -2.5 to 2.5 | Pass |
|       |        |       |         | 0           | 3.6         | -24.018 | -0.0139 | -2.5 to 2.5 | Pass |
|       |        |       |         | 10          | 3.6         | -25.663 | -0.0148 | -2.5 to 2.5 | Pass |
|       |        |       |         | 30          | 3.6         | -24.948 | -0.0144 | -2.5 to 2.5 | Pass |
|       | 40     | 3.6   | -24.204 | -0.0140     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50     | 3.6   | -25.449 | -0.0147     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 1753.5 | 15    | 0       | 20          | 3.3         | 9.770   | 0.0056  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 3.6         | 12.088  | 0.0069  | -2.5 to 2.5 | Pass |
|       |        |       |         |             | 4.2         | 14.148  | 0.0081  | -2.5 to 2.5 | Pass |
|       |        |       |         | -30         | 3.6         | 14.062  | 0.0080  | -2.5 to 2.5 | Pass |

|  |  |  |  |     |     |        |        |             |      |
|--|--|--|--|-----|-----|--------|--------|-------------|------|
|  |  |  |  | -20 | 3.6 | 17.538 | 0.0100 | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.6 | 17.896 | 0.0102 | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.6 | 18.411 | 0.0105 | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.6 | 21.429 | 0.0122 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.6 | 21.501 | 0.0123 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.6 | 22.874 | 0.0130 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.6 | 24.719 | 0.0141 | -2.5 to 2.5 | Pass |

### 3.3 B4\_5MHz

#### 3.3.1 Test Result

| Band: 4 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 1712.5          | 25            | 0      | 20         | 3.3           | 8.612            | 0.0050                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 1.688            | 0.0010                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -4.678           | -0.0027               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -12.031          | -0.0070               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -19.326          | -0.0113               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -24.691          | -0.0144               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -27.123          | -0.0158               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -33.116          | -0.0193               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -39.153          | -0.0229               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -39.783          | -0.0232               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -7.081           | -0.0041               | -2.5 to 2.5 | Pass    |
|                           | 1732.5          | 25            | 0      | 20         | 3.3           | 3.147            | 0.0018                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 3.190            | 0.0018                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 1.359            | 0.0008                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -0.930           | -0.0005               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -1.130           | -0.0007               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -0.501           | -0.0003               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -3.061           | -0.0018               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -3.519           | -0.0020               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -6.309           | -0.0036               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -4.234           | -0.0024               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -7.439           | -0.0043               | -2.5 to 2.5 | Pass    |
|                           | 1752.5          | 25            | 0      | 20         | 3.3           | 0.744            | 0.0004                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 3.290            | 0.0019                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 2.160            | 0.0012                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 3.333            | 0.0019                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | 2.918            | 0.0017                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | 4.807            | 0.0027                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | 5.536            | 0.0032                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | 5.336            | 0.0030                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | 8.612            | 0.0049                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | 9.885            | 0.0056                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | 9.613            | 0.0055                | -2.5 to 2.5 | Pass    |
| 16QAM                     | 1712.5          | 25            | 0      | 20         | 3.3           | -11.988          | -0.0070               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -16.508          | -0.0096               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -18.969          | -0.0111               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -21.529          | -0.0126               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -22.545          | -0.0132               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -25.592          | -0.0149               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -26.879          | -0.0157               | -2.5 to 2.5 | Pass    |

|  |        |    |   |     |     |         |         |             |      |
|--|--------|----|---|-----|-----|---------|---------|-------------|------|
|  |        |    |   | 10  | 3.6 | -28.009 | -0.0164 | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | -29.440 | -0.0172 | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | -32.787 | -0.0191 | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | -31.900 | -0.0186 | -2.5 to 2.5 | Pass |
|  | 1732.5 | 25 | 0 | 20  | 3.3 | -7.439  | -0.0043 | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 3.6 | -5.851  | -0.0034 | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 4.2 | -5.622  | -0.0032 | -2.5 to 2.5 | Pass |
|  |        |    |   | -30 | 3.6 | -5.822  | -0.0034 | -2.5 to 2.5 | Pass |
|  |        |    |   | -20 | 3.6 | -5.865  | -0.0034 | -2.5 to 2.5 | Pass |
|  |        |    |   | -10 | 3.6 | -4.363  | -0.0025 | -2.5 to 2.5 | Pass |
|  |        |    |   | 0   | 3.6 | -5.121  | -0.0030 | -2.5 to 2.5 | Pass |
|  |        |    |   | 10  | 3.6 | -2.518  | -0.0015 | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | -3.176  | -0.0018 | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | -2.418  | -0.0014 | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | -1.674  | -0.0010 | -2.5 to 2.5 | Pass |
|  | 1752.5 | 25 | 0 | 20  | 3.3 | 11.516  | 0.0066  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 3.6 | 13.590  | 0.0078  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 4.2 | 13.890  | 0.0079  | -2.5 to 2.5 | Pass |
|  |        |    |   | -30 | 3.6 | 15.507  | 0.0088  | -2.5 to 2.5 | Pass |
|  |        |    |   | -20 | 3.6 | 15.678  | 0.0089  | -2.5 to 2.5 | Pass |
|  |        |    |   | -10 | 3.6 | 15.392  | 0.0088  | -2.5 to 2.5 | Pass |
|  |        |    |   | 0   | 3.6 | 17.853  | 0.0102  | -2.5 to 2.5 | Pass |
|  |        |    |   | 10  | 3.6 | 21.544  | 0.0123  | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | 22.545  | 0.0129  | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | 23.746  | 0.0135  | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | 22.559  | 0.0129  | -2.5 to 2.5 | Pass |

### 3.4 B4\_10MHz

#### 3.4.1 Test Result

| Band: 4 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1715            | 50            | 0      | 20         | 3.3           | 35.076           | 0.0205                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 29.712           | 0.0173                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 24.762           | 0.0144                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 22.931           | 0.0134                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 22.616           | 0.0132                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 19.012           | 0.0111                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 20.857           | 0.0122                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 21.844           | 0.0127                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 25.849           | 0.0151                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 25.363           | 0.0148                | -2.5 to 2.5 | Pass    |
|                            | 1732.5          | 50            | 0      | 50         | 3.6           | 26.064           | 0.0152                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 20         | 3.3           | 7.668            | 0.0044                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 5.093            | 0.0029                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 3.490            | 0.0020                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 4.377            | 0.0025                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 8.526            | 0.0049                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 10.800           | 0.0062                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 14.820           | 0.0086                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 17.223           | 0.0099                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 20.099           | 0.0116                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 22.430           | 0.0129                | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |        |        |             |      |
|-------|--------|----|---|-----|-----|--------|--------|-------------|------|
|       | 1750   | 50 | 0 | 50  | 3.6 | 26.107 | 0.0151 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | 5.336  | 0.0030 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 2.875  | 0.0016 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 0.887  | 0.0005 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 2.375  | 0.0014 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 6.452  | 0.0037 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 9.012  | 0.0051 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 13.018 | 0.0074 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 15.278 | 0.0087 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 18.468 | 0.0106 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 23.303 | 0.0133 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 25.592 | 0.0146 | -2.5 to 2.5 | Pass |
| 16QAM | 1715   | 50 | 0 | 20  | 3.3 | 25.005 | 0.0146 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 26.336 | 0.0154 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 26.279 | 0.0153 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 26.979 | 0.0157 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 26.479 | 0.0154 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 27.008 | 0.0157 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 27.008 | 0.0157 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 25.949 | 0.0151 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 26.479 | 0.0154 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 25.363 | 0.0148 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 25.578 | 0.0149 | -2.5 to 2.5 | Pass |
|       | 1732.5 | 50 | 0 | 20  | 3.3 | 28.110 | 0.0162 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 32.802 | 0.0189 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 36.449 | 0.0210 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 36.478 | 0.0211 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 36.120 | 0.0208 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 1.516  | 0.0009 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 2.503  | 0.0014 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 3.748  | 0.0022 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 4.120  | 0.0024 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 5.322  | 0.0031 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 5.150  | 0.0030 | -2.5 to 2.5 | Pass |
|       | 1750   | 50 | 0 | 20  | 3.3 | 29.268 | 0.0167 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 33.145 | 0.0189 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 34.776 | 0.0199 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 35.777 | 0.0204 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 37.751 | 0.0216 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 38.195 | 0.0218 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 37.594 | 0.0215 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 37.422 | 0.0214 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 39.654 | 0.0227 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 38.767 | 0.0222 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 16.336 | 0.0093 | -2.5 to 2.5 | Pass |

### 3.5 B4\_15MHz

#### 3.5.1 Test Result

| Band: 4 / Bandwidth: 15MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1717.5          | 75            | 0      | 20         | 3.3           | 27.623           | 0.0161                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 15.321           | 0.0089                | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |        |         |             |      |
|-------|--------|----|---|-----|-----|--------|---------|-------------|------|
|       |        |    |   |     | 4.2 | 9.212  | 0.0054  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 5.550  | 0.0032  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 3.204  | 0.0019  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 4.306  | 0.0025  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 5.894  | 0.0034  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 7.324  | 0.0043  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 8.297  | 0.0048  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 8.926  | 0.0052  | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 9.871  | 0.0057  | -2.5 to 2.5 | Pass |
|       | 1732.5 | 75 | 0 | 20  | 3.3 | 20.242 | 0.0117  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 17.452 | 0.0101  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 15.950 | 0.0092  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 17.266 | 0.0100  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 20.342 | 0.0117  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 25.678 | 0.0148  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 29.268 | 0.0169  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 34.862 | 0.0201  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 9.313  | 0.0054  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -5.379 | -0.0031 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -2.317 | -0.0013 | -2.5 to 2.5 | Pass |
|       | 1747.5 | 75 | 0 | 20  | 3.3 | 15.135 | 0.0087  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 12.059 | 0.0069  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 11.244 | 0.0064  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 11.816 | 0.0068  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 15.092 | 0.0086  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 20.370 | 0.0117  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 24.104 | 0.0138  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 26.050 | 0.0149  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 28.124 | 0.0161  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 33.431 | 0.0191  | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 35.791 | 0.0205  | -2.5 to 2.5 | Pass |
| 16QAM | 1717.5 | 75 | 0 | 20  | 3.3 | 12.288 | 0.0072  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 13.862 | 0.0081  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 13.046 | 0.0076  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 15.364 | 0.0089  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 14.434 | 0.0084  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 11.902 | 0.0069  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 10.886 | 0.0063  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 10.200 | 0.0059  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 9.599  | 0.0056  | -2.5 to 2.5 | Pass |
|       | 1732.5 | 75 | 0 | 20  | 3.3 | 2.060  | 0.0012  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 6.180  | 0.0036  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 8.755  | 0.0051  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 10.529 | 0.0061  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 9.727  | 0.0056  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 9.627  | 0.0056  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 8.898  | 0.0051  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 11.716 | 0.0068  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 10.228 | 0.0059  | -2.5 to 2.5 | Pass |
|       | 1747.5 | 75 | 0 | 20  | 3.3 | 36.907 | 0.0211  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 3.991  | 0.0023  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 2.718  | 0.0016  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 3.691  | 0.0021  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 3.691  | 0.0021  | -2.5 to 2.5 | Pass |

|  |  |  |  |     |     |       |        |             |      |
|--|--|--|--|-----|-----|-------|--------|-------------|------|
|  |  |  |  | -20 | 3.6 | 3.490 | 0.0020 | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.6 | 1.802 | 0.0010 | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.6 | 1.945 | 0.0011 | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.6 | 1.659 | 0.0009 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.6 | 0.758 | 0.0004 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.6 | 0.272 | 0.0002 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.6 | 1.616 | 0.0009 | -2.5 to 2.5 | Pass |

### 3.6 B4\_20MHz

#### 3.6.1 Test Result

| Band: 4 / Bandwidth: 20MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 1720            | 100           | 0      | 20         | 3.3           | 17.052           | 0.0099                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -1.831           | -0.0011               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -6.595           | -0.0038               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -6.366           | -0.0037               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -2.189           | -0.0013               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -1.259           | -0.0007               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 4.134            | 0.0024                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 10.042           | 0.0058                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 14.091           | 0.0082                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 18.110           | 0.0105                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 21.586           | 0.0125                | -2.5 to 2.5 | Pass    |
|                            | 1732.5          | 100           | 0      | 20         | 3.3           | 13.475           | 0.0078                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 5.078            | 0.0029                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 2.718            | 0.0016                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 10.586           | 0.0061                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 15.163           | 0.0088                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 20.299           | 0.0117                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 23.260           | 0.0134                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 31.486           | 0.0182                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 36.078           | 0.0208                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 39.353           | 0.0227                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 43.888           | 0.0253                | -2.5 to 2.5 | Pass    |
|                            | 1745            | 100           | 0      | 20         | 3.3           | 8.712            | 0.0050                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 4.663            | 0.0027                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 5.794            | 0.0033                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 6.909            | 0.0040                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 10.543           | 0.0060                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 15.335           | 0.0088                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 20.213           | 0.0116                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 22.259           | 0.0128                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 26.579           | 0.0152                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 31.142           | 0.0178                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 26.336           | 0.0151                | -2.5 to 2.5 | Pass    |
| 16QAM                      | 1720            | 100           | 0      | 20         | 3.3           | 25.320           | 0.0147                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 27.008           | 0.0157                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 28.381           | 0.0165                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 26.450           | 0.0154                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 24.548           | 0.0143                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 23.818           | 0.0138                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 20.485           | 0.0119                | -2.5 to 2.5 | Pass    |

|  |        |     |   |     |     |         |         |             |      |
|--|--------|-----|---|-----|-----|---------|---------|-------------|------|
|  |        |     |   | 10  | 3.6 | 20.356  | 0.0118  | -2.5 to 2.5 | Pass |
|  |        |     |   | 30  | 3.6 | 19.541  | 0.0114  | -2.5 to 2.5 | Pass |
|  |        |     |   | 40  | 3.6 | 19.770  | 0.0115  | -2.5 to 2.5 | Pass |
|  |        |     |   | 50  | 3.6 | 20.428  | 0.0119  | -2.5 to 2.5 | Pass |
|  | 1732.5 | 100 | 0 | 20  | 3.3 | 10.028  | 0.0058  | -2.5 to 2.5 | Pass |
|  |        |     |   |     | 3.6 | 12.302  | 0.0071  | -2.5 to 2.5 | Pass |
|  |        |     |   |     | 4.2 | 12.946  | 0.0075  | -2.5 to 2.5 | Pass |
|  |        |     |   | -30 | 3.6 | 12.932  | 0.0075  | -2.5 to 2.5 | Pass |
|  |        |     |   | -20 | 3.6 | 12.975  | 0.0075  | -2.5 to 2.5 | Pass |
|  |        |     |   | -10 | 3.6 | 13.576  | 0.0078  | -2.5 to 2.5 | Pass |
|  |        |     |   | 0   | 3.6 | 12.417  | 0.0072  | -2.5 to 2.5 | Pass |
|  |        |     |   | 10  | 3.6 | 11.015  | 0.0064  | -2.5 to 2.5 | Pass |
|  |        |     |   | 30  | 3.6 | 11.415  | 0.0066  | -2.5 to 2.5 | Pass |
|  |        |     |   | 40  | 3.6 | 11.187  | 0.0065  | -2.5 to 2.5 | Pass |
|  |        |     |   | 50  | 3.6 | 11.616  | 0.0067  | -2.5 to 2.5 | Pass |
|  | 1745   | 100 | 0 | 20  | 3.3 | 4.592   | 0.0026  | -2.5 to 2.5 | Pass |
|  |        |     |   |     | 3.6 | 6.981   | 0.0040  | -2.5 to 2.5 | Pass |
|  |        |     |   |     | 4.2 | 8.311   | 0.0048  | -2.5 to 2.5 | Pass |
|  |        |     |   | -30 | 3.6 | 5.908   | 0.0034  | -2.5 to 2.5 | Pass |
|  |        |     |   | -20 | 3.6 | 1.402   | 0.0008  | -2.5 to 2.5 | Pass |
|  |        |     |   | -10 | 3.6 | 1.173   | 0.0007  | -2.5 to 2.5 | Pass |
|  |        |     |   | 0   | 3.6 | -2.718  | -0.0016 | -2.5 to 2.5 | Pass |
|  |        |     |   | 10  | 3.6 | -3.963  | -0.0023 | -2.5 to 2.5 | Pass |
|  |        |     |   | 30  | 3.6 | -6.380  | -0.0037 | -2.5 to 2.5 | Pass |
|  |        |     |   | 40  | 3.6 | -6.967  | -0.0040 | -2.5 to 2.5 | Pass |
|  |        |     |   | 50  | 3.6 | -10.142 | -0.0058 | -2.5 to 2.5 | Pass |

## 4. Frequency Stability

### 4.1 B40a\_5MHz

#### 4.1.1 Test Result

| Band: 40a / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2307.5          | 25            | 0      | 20         | 3.3           | -1.359           | -0.0006               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -0.343           | -0.0001               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | 12.088           | 0.0052                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | 7.339            | 0.0032                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | 6.166            | 0.0027                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | 5.565            | 0.0024                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | 4.978            | 0.0022                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | 5.336            | 0.0023                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -6.924           | -0.0030               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -8.297           | -0.0036               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | 0.572            | 0.0002                | -2.5 to 2.5 | Pass    |
|                             | 2310            | 25            | 0      | 20         | 3.3           | 0.973            | 0.0004                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 3.862            | 0.0017                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -6.237           | -0.0027               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -5.307           | -0.0023               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -9.699           | -0.0042               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -1.745           | -0.0008               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -2.789           | -0.0012               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
|       | 2312.5 | 25 | 0 | 10  | 3.6 | 1.602   | 0.0007  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -1.745  | -0.0008 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -8.912  | -0.0039 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -9.141  | -0.0040 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | -10.271 | -0.0044 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -8.554  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -10.629 | -0.0046 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 1.287   | 0.0006  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -13.046 | -0.0056 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -11.287 | -0.0049 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 1.059   | 0.0005  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -13.375 | -0.0058 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -13.461 | -0.0058 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -1.059  | -0.0005 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -1.788  | -0.0008 | -2.5 to 2.5 | Pass |
| 16QAM | 2307.5 | 25 | 0 | 20  | 3.3 | -8.483  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 0.243   | 0.0001  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 0.429   | 0.0002  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 1.330   | 0.0006  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -6.351  | -0.0028 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 0.515   | 0.0002  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -6.952  | -0.0030 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -11.530 | -0.0050 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -6.280  | -0.0027 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -7.596  | -0.0033 | -2.5 to 2.5 | Pass |
|       | 2310   | 25 | 0 | 50  | 3.6 | -8.712  | -0.0038 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | -6.409  | -0.0028 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -4.649  | -0.0020 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -12.231 | -0.0053 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -8.669  | -0.0038 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -0.343  | -0.0001 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -2.518  | -0.0011 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -10.729 | -0.0046 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -2.818  | -0.0012 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -0.815  | -0.0004 | -2.5 to 2.5 | Pass |
|       | 2312.5 | 25 | 0 | 40  | 3.6 | -7.954  | -0.0034 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -9.370  | -0.0041 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | -17.810 | -0.0077 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -0.243  | -0.0001 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 1.817   | 0.0008  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 2.418   | 0.0010  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 2.432   | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 2.646   | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 2.418   | 0.0010  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -13.189 | -0.0057 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -8.497  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -8.869  | -0.0038 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 2.789   | 0.0012  | -2.5 to 2.5 | Pass |

## 4.2 B40a\_10MHz

### 4.2.1 Test Result

| Band: 40a / Bandwidth: 10MHz |           |               |       |         |             |                       |         |
|------------------------------|-----------|---------------|-------|---------|-------------|-----------------------|---------|
| Modulation                   | Frequency | RB Allocation | Temp. | Voltage | Freq. Error | Freq. vs. Rated (ppm) | Verdict |

|       | (MHz) | Size   | Offset  | (°C)        | (VDC) | (Hz)   | Result  | Limit       |      |
|-------|-------|--------|---------|-------------|-------|--------|---------|-------------|------|
| QPSK  | 2310  | 50     | 0       | 20          | 3.3   | 16.537 | 0.0072  | -2.5 to 2.5 | Pass |
|       |       |        |         |             | 3.6   | 7.324  | 0.0032  | -2.5 to 2.5 | Pass |
|       |       |        |         |             | 4.2   | 16.565 | 0.0072  | -2.5 to 2.5 | Pass |
|       |       |        |         | -30         | 3.6   | 15.335 | 0.0066  | -2.5 to 2.5 | Pass |
|       |       |        |         | -20         | 3.6   | 4.377  | 0.0019  | -2.5 to 2.5 | Pass |
|       |       |        |         | -10         | 3.6   | 13.118 | 0.0057  | -2.5 to 2.5 | Pass |
|       |       |        |         | 0           | 3.6   | 10.400 | 0.0045  | -2.5 to 2.5 | Pass |
|       |       |        |         | 10          | 3.6   | 4.592  | 0.0020  | -2.5 to 2.5 | Pass |
|       |       |        |         | 30          | 3.6   | 8.054  | 0.0035  | -2.5 to 2.5 | Pass |
|       |       |        |         | 40          | 3.6   | -2.031 | -0.0009 | -2.5 to 2.5 | Pass |
| 50    | 3.6   | -4.163 | -0.0018 | -2.5 to 2.5 | Pass  |        |         |             |      |
| 16QAM | 2310  | 50     | 0       | 20          | 3.3   | -4.449 | -0.0019 | -2.5 to 2.5 | Pass |
|       |       |        |         |             | 3.6   | 6.037  | 0.0026  | -2.5 to 2.5 | Pass |
|       |       |        |         |             | 4.2   | 7.224  | 0.0031  | -2.5 to 2.5 | Pass |
|       |       |        |         | -30         | 3.6   | 7.682  | 0.0033  | -2.5 to 2.5 | Pass |
|       |       |        |         | -20         | 3.6   | 11.759 | 0.0051  | -2.5 to 2.5 | Pass |
|       |       |        |         | -10         | 3.6   | 10.829 | 0.0047  | -2.5 to 2.5 | Pass |
|       |       |        |         | 0           | 3.6   | 3.934  | 0.0017  | -2.5 to 2.5 | Pass |
|       |       |        |         | 10          | 3.6   | 11.616 | 0.0050  | -2.5 to 2.5 | Pass |
|       |       |        |         | 30          | 3.6   | 12.217 | 0.0053  | -2.5 to 2.5 | Pass |
|       |       |        |         | 40          | 3.6   | 13.690 | 0.0059  | -2.5 to 2.5 | Pass |
| 50    | 3.6   | 3.304  | 0.0014  | -2.5 to 2.5 | Pass  |        |         |             |      |

## 5. Frequency Stability

### 5.1 B40b\_5MHz

#### 5.1.1 Test Result

| Band: 40b / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2352.5          | 25            | 0      | 20         | 3.3           | -17.281          | -0.0073               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -18.754          | -0.0080               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -10.114          | -0.0043               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -18.897          | -0.0080               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -20.256          | -0.0086               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -21.071          | -0.0090               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -12.860          | -0.0055               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -20.471          | -0.0087               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -12.646          | -0.0054               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -13.576          | -0.0058               | -2.5 to 2.5 | Pass    |
|                             | 2355            | 25            | 0      | 20         | 3.6           | -17.495          | -0.0074               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.3           | -6.051           | -0.0026               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 2.575            | 0.0011                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 4.2           | -4.377           | -0.0019               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -6.080           | -0.0026               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 2.475            | 0.0011                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | 1.960            | 0.0008                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | 0.558            | 0.0002                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | 2.975            | 0.0013                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -3.462           | -0.0015               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -1.702           | -0.0007               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
|       | 2357.5 | 25 | 0 | 50  | 3.6 | -10.343 | -0.0044 | -2.5 to 2.5 | Pass |
|       |        |    |   | 20  | 3.3 | 8.068   | 0.0034  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 19.841  | 0.0084  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 22.445  | 0.0095  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 10.629  | 0.0045  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 16.122  | 0.0068  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 11.287  | 0.0048  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 7.768   | 0.0033  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 6.037   | 0.0026  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 12.445  | 0.0053  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 6.151   | 0.0026  | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 5.922   | 0.0025  | -2.5 to 2.5 | Pass |
| 16QAM | 2352.5 | 25 | 0 | 20  | 3.3 | -12.417 | -0.0053 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -11.616 | -0.0049 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -2.890  | -0.0012 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -11.029 | -0.0047 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -11.029 | -0.0047 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -11.158 | -0.0047 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -11.144 | -0.0047 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -10.757 | -0.0046 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -9.856  | -0.0042 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -1.588  | -0.0007 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -9.155  | -0.0039 | -2.5 to 2.5 | Pass |
|       | 2355   | 25 | 0 | 20  | 3.3 | 1.516   | 0.0006  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 11.616  | 0.0049  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -1.216  | -0.0005 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 0.072   | 0.0000  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 5.651   | 0.0024  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -0.587  | -0.0002 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -0.701  | -0.0003 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 9.098   | 0.0039  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 7.367   | 0.0031  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -0.515  | -0.0002 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 9.499   | 0.0040  | -2.5 to 2.5 | Pass |
|       | 2357.5 | 25 | 0 | 20  | 3.3 | 17.195  | 0.0073  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | 17.595  | 0.0075  | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | 20.113  | 0.0085  | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | 24.848  | 0.0105  | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | 20.084  | 0.0085  | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | 27.394  | 0.0116  | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | 17.953  | 0.0076  | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 19.069  | 0.0081  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 23.589  | 0.0100  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | 23.603  | 0.0100  | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 26.193  | 0.0111  | -2.5 to 2.5 | Pass |

## 5.2 B40b\_10MHz

### 5.2.1 Test Result

| Band: 40b / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|------------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                   | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                              |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                         | 2355            | 50            | 0      | 20         | 3.3           | 12.674           | 0.0054                | -2.5 to 2.5 | Pass    |
|                              |                 |               |        |            | 3.6           | 5.522            | 0.0023                | -2.5 to 2.5 | Pass    |

|       |      |    |   |     |     |        |        |             |      |
|-------|------|----|---|-----|-----|--------|--------|-------------|------|
|       |      |    |   |     | 4.2 | 11.144 | 0.0047 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | 11.516 | 0.0049 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | 11.044 | 0.0047 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | 4.606  | 0.0020 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | 0.501  | 0.0002 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | 5.736  | 0.0024 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 9.227  | 0.0039 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | 5.322  | 0.0023 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | 6.852  | 0.0029 | -2.5 to 2.5 | Pass |
| 16QAM | 2355 | 50 | 0 | 20  | 3.3 | 12.860 | 0.0055 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | 23.460 | 0.0100 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | 16.937 | 0.0072 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | 27.666 | 0.0117 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | 18.897 | 0.0080 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | 26.207 | 0.0111 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | 25.249 | 0.0107 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | 29.483 | 0.0125 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 24.962 | 0.0106 | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | 29.311 | 0.0124 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | 29.411 | 0.0125 | -2.5 to 2.5 | Pass |

## 6. Frequency Stability

### 6.1 B41\_5MHz

#### 6.1.1 Test Result

| Band: 41 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 2498.5          | 25            | 0      | 20         | 3.3           | -20.943          | -0.0084               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -20.027          | -0.0080               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -18.926          | -0.0076               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -17.424          | -0.0070               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -17.552          | -0.0070               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -16.494          | -0.0066               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -18.168          | -0.0073               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -14.248          | -0.0057               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -20.499          | -0.0082               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -23.975          | -0.0096               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -27.051          | -0.0108               | -2.5 to 2.5 | Pass    |
|                            | 2593            | 25            | 0      | 20         | 3.3           | -27.008          | -0.0104               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -37.022          | -0.0143               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -21.858          | -0.0084               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -20.185          | -0.0078               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -18.210          | -0.0070               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -16.794          | -0.0065               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -25.821          | -0.0100               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -23.975          | -0.0092               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -13.304          | -0.0051               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -22.016          | -0.0085               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -8.526           | -0.0033               | -2.5 to 2.5 | Pass    |
|                            | 2687.5          | 25            | 0      | 20         | 3.3           | -13.418          | -0.0050               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -13.547          | -0.0050               | -2.5 to 2.5 | Pass    |

|       |        |    |   |     |     |         |         |             |      |
|-------|--------|----|---|-----|-----|---------|---------|-------------|------|
|       |        |    |   |     | 4.2 | -23.990 | -0.0089 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -23.003 | -0.0086 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -25.105 | -0.0093 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -16.451 | -0.0061 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -16.150 | -0.0060 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -27.137 | -0.0101 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -29.655 | -0.0110 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -32.229 | -0.0120 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -26.522 | -0.0099 | -2.5 to 2.5 | Pass |
| 16QAM | 2498.5 | 25 | 0 | 20  | 3.3 | -20.871 | -0.0084 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -20.413 | -0.0082 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -21.544 | -0.0086 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -20.370 | -0.0082 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -20.213 | -0.0081 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -17.738 | -0.0071 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -14.534 | -0.0058 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -17.910 | -0.0072 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -17.109 | -0.0068 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -15.850 | -0.0063 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -12.603 | -0.0050 | -2.5 to 2.5 | Pass |
|       | 2593   | 25 | 0 | 20  | 3.3 | -15.435 | -0.0060 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -4.148  | -0.0016 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -3.362  | -0.0013 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -12.975 | -0.0050 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -9.527  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -1.202  | -0.0005 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -6.995  | -0.0027 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | 3.591   | 0.0014  | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | 5.822   | 0.0022  | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -2.747  | -0.0011 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | 8.082   | 0.0031  | -2.5 to 2.5 | Pass |
|       | 2687.5 | 25 | 0 | 20  | 3.3 | -24.219 | -0.0090 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 3.6 | -26.708 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |    |   |     | 4.2 | -26.493 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |    |   | -30 | 3.6 | -33.388 | -0.0124 | -2.5 to 2.5 | Pass |
|       |        |    |   | -20 | 3.6 | -26.650 | -0.0099 | -2.5 to 2.5 | Pass |
|       |        |    |   | -10 | 3.6 | -34.876 | -0.0130 | -2.5 to 2.5 | Pass |
|       |        |    |   | 0   | 3.6 | -23.704 | -0.0088 | -2.5 to 2.5 | Pass |
|       |        |    |   | 10  | 3.6 | -27.466 | -0.0102 | -2.5 to 2.5 | Pass |
|       |        |    |   | 30  | 3.6 | -31.385 | -0.0117 | -2.5 to 2.5 | Pass |
|       |        |    |   | 40  | 3.6 | -24.076 | -0.0090 | -2.5 to 2.5 | Pass |
|       |        |    |   | 50  | 3.6 | -33.131 | -0.0123 | -2.5 to 2.5 | Pass |

## 6.2 B41\_10MHz

### 6.2.1 Test Result

| Band: 41 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2501            | 50            | 0      | 20         | 3.3           | -8.626           | -0.0034               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -1.931           | -0.0008               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -13.275          | -0.0053               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -15.206          | -0.0061               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -7.324           | -0.0029               | -2.5 to 2.5 | Pass    |

|      |       |         |         |        |         |         |         |             |             |         |
|------|-------|---------|---------|--------|---------|---------|---------|-------------|-------------|---------|
|      |       |         |         | -10    | 3.6     | -16.694 | -0.0067 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 0      | 3.6     | -22.645 | -0.0091 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 10     | 3.6     | -11.015 | -0.0044 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 30     | 3.6     | -25.249 | -0.0101 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 40     | 3.6     | -13.847 | -0.0055 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 50     | 3.6     | -15.850 | -0.0063 | -2.5 to 2.5 | Pass        |         |
|      | 2593  | 50      | 0       | 20     | 3.3     | -30.813 | -0.0119 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         |        | 3.6     | -25.263 | -0.0097 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         |        | 4.2     | -6.480  | -0.0025 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -30    | 3.6     | -4.764  | -0.0018 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -20    | 3.6     | -5.865  | -0.0023 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | -10    | 3.6     | -18.654 | -0.0072 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 0      | 3.6     | -14.977 | -0.0058 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 10     | 3.6     | -14.348 | -0.0055 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 30     | 3.6     | -13.404 | -0.0052 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 40     | 3.6     | -14.877 | -0.0057 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 50     | 3.6     | -14.834 | -0.0057 | -2.5 to 2.5 | Pass        |         |
|      |       |         |         | 2685   | 50      | 0       | 20      | 3.3         | -27.180     | -0.0101 |
|      | 3.6   | -14.992 | -0.0056 |        |         |         |         | -2.5 to 2.5 | Pass        |         |
|      | 4.2   | -27.108 | -0.0101 |        |         |         |         | -2.5 to 2.5 | Pass        |         |
|      | -30   | 3.6     | -27.308 |        |         |         | -0.0102 | -2.5 to 2.5 | Pass        |         |
|      | -20   | 3.6     | -32.144 |        |         |         | -0.0120 | -2.5 to 2.5 | Pass        |         |
|      | -10   | 3.6     | -24.633 |        |         |         | -0.0092 | -2.5 to 2.5 | Pass        |         |
|      | 0     | 3.6     | -40.298 |        |         |         | -0.0150 | -2.5 to 2.5 | Pass        |         |
|      | 10    | 3.6     | -32.229 |        |         |         | -0.0120 | -2.5 to 2.5 | Pass        |         |
|      | 30    | 3.6     | -17.295 |        |         |         | -0.0064 | -2.5 to 2.5 | Pass        |         |
|      | 40    | 3.6     | -1.502  |        |         |         | -0.0006 | -2.5 to 2.5 | Pass        |         |
|      | 50    | 3.6     | -3.490  |        |         |         | -0.0013 | -2.5 to 2.5 | Pass        |         |
|      | 16QAM | 2501    | 50      |        |         |         | 0       | 20          | 3.3         | -27.938 |
|      |       |         |         | 3.6    | -23.546 | -0.0094 |         |             | -2.5 to 2.5 | Pass    |
|      |       |         |         | 4.2    | -22.602 | -0.0090 |         |             | -2.5 to 2.5 | Pass    |
|      |       |         |         | -30    | 3.6     | -21.100 |         | -0.0084     | -2.5 to 2.5 | Pass    |
|      |       |         |         | -20    | 3.6     | -20.170 |         | -0.0081     | -2.5 to 2.5 | Pass    |
|      |       |         |         | -10    | 3.6     | -20.142 |         | -0.0081     | -2.5 to 2.5 | Pass    |
|      |       |         |         | 0      | 3.6     | -16.823 |         | -0.0067     | -2.5 to 2.5 | Pass    |
|      |       |         |         | 10     | 3.6     | -18.225 |         | -0.0073     | -2.5 to 2.5 | Pass    |
| 30   |       |         |         | 3.6    | -17.924 | -0.0072 |         | -2.5 to 2.5 | Pass        |         |
| 40   |       |         |         | 3.6    | -14.133 | -0.0057 |         | -2.5 to 2.5 | Pass        |         |
| 50   |       |         |         | 3.6    | -13.905 | -0.0056 |         | -2.5 to 2.5 | Pass        |         |
| 2593 |       |         |         | 50     | 0       | 20      |         | 3.3         | -6.509      | -0.0025 |
|      |       | 3.6     | -2.747  |        |         |         | -0.0011 | -2.5 to 2.5 | Pass        |         |
|      |       | 4.2     | 6.166   |        |         |         | 0.0024  | -2.5 to 2.5 | Pass        |         |
|      |       | -30     | 3.6     |        |         | 8.512   | 0.0033  | -2.5 to 2.5 | Pass        |         |
|      |       | -20     | 3.6     |        |         | 13.933  | 0.0054  | -2.5 to 2.5 | Pass        |         |
|      |       | -10     | 3.6     |        |         | 15.249  | 0.0059  | -2.5 to 2.5 | Pass        |         |
|      |       | 0       | 3.6     |        |         | 4.134   | 0.0016  | -2.5 to 2.5 | Pass        |         |
|      |       | 10      | 3.6     |        |         | 6.781   | 0.0026  | -2.5 to 2.5 | Pass        |         |
|      |       | 30      | 3.6     |        |         | 13.218  | 0.0051  | -2.5 to 2.5 | Pass        |         |
|      |       | 40      | 3.6     |        |         | 19.584  | 0.0076  | -2.5 to 2.5 | Pass        |         |
|      |       | 50      | 3.6     |        |         | 25.492  | 0.0098  | -2.5 to 2.5 | Pass        |         |
|      |       | 2685    | 50      |        |         | 0       | 20      | 3.3         | 6.394       | 0.0024  |
| 3.6  |       |         |         | 7.510  | 0.0028  |         |         | -2.5 to 2.5 | Pass        |         |
| 4.2  |       |         |         | -3.033 | -0.0011 |         |         | -2.5 to 2.5 | Pass        |         |
| -30  |       |         |         | 3.6    | 7.510   |         | 0.0028  | -2.5 to 2.5 | Pass        |         |
| -20  |       |         |         | 3.6    | 6.166   |         | 0.0023  | -2.5 to 2.5 | Pass        |         |
| -10  |       |         |         | 3.6    | 8.039   |         | 0.0030  | -2.5 to 2.5 | Pass        |         |
| 0    |       |         |         | 3.6    | -4.549  |         | -0.0017 | -2.5 to 2.5 | Pass        |         |

|  |  |  |  |    |     |        |         |             |      |
|--|--|--|--|----|-----|--------|---------|-------------|------|
|  |  |  |  | 10 | 3.6 | 8.755  | 0.0033  | -2.5 to 2.5 | Pass |
|  |  |  |  | 30 | 3.6 | -4.735 | -0.0018 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40 | 3.6 | 8.841  | 0.0033  | -2.5 to 2.5 | Pass |
|  |  |  |  | 50 | 3.6 | -0.629 | -0.0002 | -2.5 to 2.5 | Pass |

## 6.3 B41\_15MHz

### 6.3.1 Test Result

| Band: 41 / Bandwidth: 15MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2503.5          | 75            | 0      | 20         | 3.3           | -11.115          | -0.0044               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -6.652           | -0.0027               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -6.051           | -0.0024               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | 1.116            | 0.0004                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -9.112           | -0.0036               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -9.313           | -0.0037               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | 0.129            | 0.0001                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -4.506           | -0.0018               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -4.578           | -0.0018               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -20.871          | -0.0083               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -13.418          | -0.0054               | -2.5 to 2.5 | Pass    |
|                             | 2593            | 75            | 0      | 20         | 3.3           | -37.022          | -0.0143               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -17.381          | -0.0067               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -17.753          | -0.0068               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -15.206          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -26.021          | -0.0100               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -25.120          | -0.0097               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -25.191          | -0.0097               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -24.047          | -0.0093               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -23.088          | -0.0089               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -8.311           | -0.0032               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -9.999           | -0.0039               | -2.5 to 2.5 | Pass    |
|                             | 2682.5          | 75            | 0      | 20         | 3.3           | -10.886          | -0.0041               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -12.875          | -0.0048               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -12.960          | -0.0048               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -16.007          | -0.0060               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -15.936          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -21.958          | -0.0082               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -22.259          | -0.0083               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -27.623          | -0.0103               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -27.022          | -0.0101               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -34.103          | -0.0127               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -38.867          | -0.0145               | -2.5 to 2.5 | Pass    |
| 16QAM                       | 2503.5          | 75            | 0      | 20         | 3.3           | -7.839           | -0.0031               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -4.020           | -0.0016               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -10.300          | -0.0041               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -17.738          | -0.0071               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -3.605           | -0.0014               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -19.369          | -0.0077               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -15.492          | -0.0062               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -1.903           | -0.0008               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -15.635          | -0.0062               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -12.646          | -0.0051               | -2.5 to 2.5 | Pass    |

|  |        |     |        |         |             |         |         |             |      |
|--|--------|-----|--------|---------|-------------|---------|---------|-------------|------|
|  | 2593   | 75  | 0      | 50      | 3.6         | -14.248 | -0.0057 | -2.5 to 2.5 | Pass |
|  |        |     |        | 20      | 3.3         | -6.638  | -0.0026 | -2.5 to 2.5 | Pass |
|  |        |     |        |         | 3.6         | -16.394 | -0.0063 | -2.5 to 2.5 | Pass |
|  |        |     |        |         | 4.2         | -7.925  | -0.0031 | -2.5 to 2.5 | Pass |
|  |        |     |        | -30     | 3.6         | -4.005  | -0.0015 | -2.5 to 2.5 | Pass |
|  |        |     |        | -20     | 3.6         | 1.030   | 0.0004  | -2.5 to 2.5 | Pass |
|  |        |     |        | -10     | 3.6         | -6.709  | -0.0026 | -2.5 to 2.5 | Pass |
|  |        |     |        | 0       | 3.6         | -7.010  | -0.0027 | -2.5 to 2.5 | Pass |
|  |        |     |        | 10      | 3.6         | 7.582   | 0.0029  | -2.5 to 2.5 | Pass |
|  |        |     |        | 30      | 3.6         | -2.217  | -0.0009 | -2.5 to 2.5 | Pass |
|  | 40     | 3.6 | -1.345 | -0.0005 | -2.5 to 2.5 | Pass    |         |             |      |
|  | 50     | 3.6 | 14.791 | 0.0057  | -2.5 to 2.5 | Pass    |         |             |      |
|  | 2682.5 | 75  | 0      | 20      | 3.3         | -37.093 | -0.0138 | -2.5 to 2.5 | Pass |
|  |        |     |        |         | 3.6         | -37.665 | -0.0140 | -2.5 to 2.5 | Pass |
|  |        |     |        |         | 4.2         | -38.323 | -0.0143 | -2.5 to 2.5 | Pass |
|  |        |     |        | -30     | 3.6         | -39.167 | -0.0146 | -2.5 to 2.5 | Pass |
|  |        |     |        | -20     | 3.6         | -37.293 | -0.0139 | -2.5 to 2.5 | Pass |
|  |        |     |        | -10     | 3.6         | -39.210 | -0.0146 | -2.5 to 2.5 | Pass |
|  |        |     |        | 0       | 3.6         | -37.022 | -0.0138 | -2.5 to 2.5 | Pass |
|  |        |     |        | 10      | 3.6         | -35.219 | -0.0131 | -2.5 to 2.5 | Pass |
|  |        |     |        | 30      | 3.6         | -34.404 | -0.0128 | -2.5 to 2.5 | Pass |
|  |        |     |        | 40      | 3.6         | -38.867 | -0.0145 | -2.5 to 2.5 | Pass |
|  |        |     |        | 50      | 3.6         | -37.851 | -0.0141 | -2.5 to 2.5 | Pass |

## 6.4 B41\_20MHz

### 6.4.1 Test Result

| Band: 41 / Bandwidth: 20MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 2506            | 100           | 0      | 20         | 3.3           | 2.060            | 0.0008                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 8.426            | 0.0034                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | 7.925            | 0.0032                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | 6.924            | 0.0028                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | 0.114            | 0.0000                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -3.963           | -0.0016               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -10.228          | -0.0041               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -16.122          | -0.0064               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -17.552          | -0.0070               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -21.257          | -0.0085               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -23.432          | -0.0094               | -2.5 to 2.5 | Pass    |
|                             | 2593            | 100           | 0      | 20         | 3.3           | -24.848          | -0.0096               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -28.868          | -0.0111               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.2           | -15.221          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.6           | -28.067          | -0.0108               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.6           | -27.280          | -0.0105               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.6           | -13.089          | -0.0050               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.6           | -14.920          | -0.0058               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.6           | -28.152          | -0.0109               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.6           | -25.535          | -0.0098               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.6           | -15.321          | -0.0059               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.6           | -29.855          | -0.0115               | -2.5 to 2.5 | Pass    |
|                             | 2680            | 100           | 0      | 20         | 3.3           | 9.255            | 0.0035                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | 8.225            | 0.0031                | -2.5 to 2.5 | Pass    |

|       |      |     |   |     |     |         |         |             |      |
|-------|------|-----|---|-----|-----|---------|---------|-------------|------|
|       |      |     |   |     | 4.2 | 5.622   | 0.0021  | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | 9.742   | 0.0036  | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | 0.343   | 0.0001  | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -8.097  | -0.0030 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -12.746 | -0.0048 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -16.909 | -0.0063 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -21.014 | -0.0078 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -23.646 | -0.0088 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -25.535 | -0.0095 | -2.5 to 2.5 | Pass |
| 16QAM | 2506 | 100 | 0 | 20  | 3.3 | -24.004 | -0.0096 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -22.788 | -0.0091 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -20.413 | -0.0081 | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -19.383 | -0.0077 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -21.257 | -0.0085 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -18.597 | -0.0074 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | 0.014   | 0.0000  | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -15.850 | -0.0063 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -14.348 | -0.0057 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -11.458 | -0.0046 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -8.698  | -0.0035 | -2.5 to 2.5 | Pass |
|       | 2593 | 100 | 0 | 20  | 3.3 | -28.138 | -0.0109 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -13.890 | -0.0054 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -12.946 | -0.0050 | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -18.568 | -0.0072 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -2.217  | -0.0009 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -11.859 | -0.0046 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -5.336  | -0.0021 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -4.048  | -0.0016 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | 10.500  | 0.0040  | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | 1.030   | 0.0004  | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | 2.146   | 0.0008  | -2.5 to 2.5 | Pass |
|       | 2680 | 100 | 0 | 20  | 3.3 | -25.749 | -0.0096 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 3.6 | -34.332 | -0.0128 | -2.5 to 2.5 | Pass |
|       |      |     |   |     | 4.2 | -28.124 | -0.0105 | -2.5 to 2.5 | Pass |
|       |      |     |   | -30 | 3.6 | -37.165 | -0.0139 | -2.5 to 2.5 | Pass |
|       |      |     |   | -20 | 3.6 | -41.227 | -0.0154 | -2.5 to 2.5 | Pass |
|       |      |     |   | -10 | 3.6 | -42.529 | -0.0159 | -2.5 to 2.5 | Pass |
|       |      |     |   | 0   | 3.6 | -45.877 | -0.0171 | -2.5 to 2.5 | Pass |
|       |      |     |   | 10  | 3.6 | -7.010  | -0.0026 | -2.5 to 2.5 | Pass |
|       |      |     |   | 30  | 3.6 | -11.101 | -0.0041 | -2.5 to 2.5 | Pass |
|       |      |     |   | 40  | 3.6 | -13.218 | -0.0049 | -2.5 to 2.5 | Pass |
|       |      |     |   | 50  | 3.6 | -20.871 | -0.0078 | -2.5 to 2.5 | Pass |

## 7. Frequency Stability

### 7.1 B5\_1.4MHz

#### 7.1.1 Test Result

| Band: 5 / Bandwidth: 1.4MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 824.7           | 6             | 0      | 20         | 3.3           | 2.203            | 0.0027                | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.6           | -4.606           | -0.0056               | -2.5 to 2.5 | Pass    |

|       |       |         |         |             |             |         |         |             |      |
|-------|-------|---------|---------|-------------|-------------|---------|---------|-------------|------|
|       |       |         |         |             | 4.2         | -7.539  | -0.0091 | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | -8.469  | -0.0103 | -2.5 to 2.5 | Pass |
|       |       |         |         | -20         | 3.6         | -7.868  | -0.0095 | -2.5 to 2.5 | Pass |
|       |       |         |         | -10         | 3.6         | -6.380  | -0.0077 | -2.5 to 2.5 | Pass |
|       |       |         |         | 0           | 3.6         | -6.995  | -0.0085 | -2.5 to 2.5 | Pass |
|       |       |         |         | 10          | 3.6         | -5.150  | -0.0062 | -2.5 to 2.5 | Pass |
|       |       |         |         | 30          | 3.6         | -3.233  | -0.0039 | -2.5 to 2.5 | Pass |
|       |       |         |         | 40          | 3.6         | -1.459  | -0.0018 | -2.5 to 2.5 | Pass |
|       |       |         |         | 50          | 3.6         | -1.817  | -0.0022 | -2.5 to 2.5 | Pass |
|       | 836.5 | 6       | 0       | 20          | 3.3         | 10.858  | 0.0130  | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 3.6         | -13.046 | -0.0156 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 4.2         | -35.634 | -0.0426 | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | -30.084 | -0.0360 | -2.5 to 2.5 | Pass |
|       |       |         |         | -20         | 3.6         | -14.620 | -0.0175 | -2.5 to 2.5 | Pass |
|       |       |         |         | -10         | 3.6         | -44.532 | -0.0532 | -2.5 to 2.5 | Pass |
|       |       |         |         | 0           | 3.6         | -25.034 | -0.0299 | -2.5 to 2.5 | Pass |
|       |       |         |         | 10          | 3.6         | 0.501   | 0.0006  | -2.5 to 2.5 | Pass |
|       |       |         |         | 30          | 3.6         | -23.246 | -0.0278 | -2.5 to 2.5 | Pass |
|       | 40    | 3.6     | -43.216 | -0.0517     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50    | 3.6     | -18.539 | -0.0222     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 848.3 | 6       | 0       | 20          | 3.3         | 1.431   | 0.0017  | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 3.6         | -7.153  | -0.0084 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 4.2         | -17.681 | -0.0208 | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | -27.723 | -0.0327 | -2.5 to 2.5 | Pass |
|       |       |         |         | -20         | 3.6         | -38.352 | -0.0452 | -2.5 to 2.5 | Pass |
|       |       |         |         | -10         | 3.6         | 2.689   | 0.0032  | -2.5 to 2.5 | Pass |
|       |       |         |         | 0           | 3.6         | -7.396  | -0.0087 | -2.5 to 2.5 | Pass |
|       |       |         |         | 10          | 3.6         | -14.806 | -0.0175 | -2.5 to 2.5 | Pass |
|       |       |         |         | 30          | 3.6         | -22.817 | -0.0269 | -2.5 to 2.5 | Pass |
|       | 40    | 3.6     | -30.470 | -0.0359     | -2.5 to 2.5 | Pass    |         |             |      |
| 50    | 3.6   | -36.263 | -0.0427 | -2.5 to 2.5 | Pass        |         |         |             |      |
| 16QAM | 824.7 | 6       | 0       | 20          | 3.3         | -0.615  | -0.0007 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 3.6         | 0.916   | 0.0011  | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 4.2         | 3.033   | 0.0037  | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | 3.161   | 0.0038  | -2.5 to 2.5 | Pass |
|       |       |         |         | -20         | 3.6         | 5.636   | 0.0068  | -2.5 to 2.5 | Pass |
|       |       |         |         | -10         | 3.6         | 6.309   | 0.0077  | -2.5 to 2.5 | Pass |
|       |       |         |         | 0           | 3.6         | 5.050   | 0.0061  | -2.5 to 2.5 | Pass |
|       |       |         |         | 10          | 3.6         | 6.151   | 0.0075  | -2.5 to 2.5 | Pass |
|       |       |         |         | 30          | 3.6         | 6.580   | 0.0080  | -2.5 to 2.5 | Pass |
|       | 40    | 3.6     | 7.839   | 0.0095      | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50    | 3.6     | 7.982   | 0.0097      | -2.5 to 2.5 | Pass    |         |             |      |
|       | 836.5 | 6       | 0       | 20          | 3.3         | -36.707 | -0.0439 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 3.6         | -2.046  | -0.0024 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 4.2         | -15.063 | -0.0180 | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | -27.609 | -0.0330 | -2.5 to 2.5 | Pass |
|       |       |         |         | -20         | 3.6         | -38.323 | -0.0458 | -2.5 to 2.5 | Pass |
|       |       |         |         | -10         | 3.6         | 1.445   | 0.0017  | -2.5 to 2.5 | Pass |
|       |       |         |         | 0           | 3.6         | -7.911  | -0.0095 | -2.5 to 2.5 | Pass |
|       |       |         |         | 10          | 3.6         | -18.368 | -0.0220 | -2.5 to 2.5 | Pass |
|       |       |         |         | 30          | 3.6         | -25.463 | -0.0304 | -2.5 to 2.5 | Pass |
|       | 40    | 3.6     | -34.189 | -0.0409     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 50    | 3.6     | -41.127 | -0.0492     | -2.5 to 2.5 | Pass    |         |             |      |
|       | 848.3 | 6       | 0       | 20          | 3.3         | -43.430 | -0.0512 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 3.6         | -2.618  | -0.0031 | -2.5 to 2.5 | Pass |
|       |       |         |         |             | 4.2         | -6.409  | -0.0076 | -2.5 to 2.5 | Pass |
|       |       |         |         | -30         | 3.6         | -9.713  | -0.0114 | -2.5 to 2.5 | Pass |

|  |  |  |  |     |     |         |         |             |      |
|--|--|--|--|-----|-----|---------|---------|-------------|------|
|  |  |  |  | -20 | 3.6 | -12.975 | -0.0153 | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.6 | -15.249 | -0.0180 | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.6 | -17.738 | -0.0209 | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.6 | -21.043 | -0.0248 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.6 | -23.746 | -0.0280 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.6 | -26.708 | -0.0315 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.6 | -29.111 | -0.0343 | -2.5 to 2.5 | Pass |

## 7.2 B5\_3MHz

### 7.2.1 Test Result

| Band: 5 / Bandwidth: 3MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 825.5           | 15            | 0      | 20         | 3.3           | -0.100           | -0.0001               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -9.284           | -0.0112               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -20.614          | -0.0250               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -32.830          | -0.0398               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -43.402          | -0.0526               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -2.446           | -0.0030               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -10.486          | -0.0127               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -17.896          | -0.0217               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -23.961          | -0.0290               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -30.212          | -0.0366               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -34.504          | -0.0418               | -2.5 to 2.5 | Pass    |
|                           | 836.5           | 15            | 0      | 20         | 3.3           | 3.805            | 0.0045                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 3.161            | 0.0038                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 2.446            | 0.0029                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 0.372            | 0.0004                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | 0.715            | 0.0009                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -0.772           | -0.0009               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -1.302           | -0.0016               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -3.676           | -0.0044               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -2.503           | -0.0030               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -4.592           | -0.0055               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -5.007           | -0.0060               | -2.5 to 2.5 | Pass    |
|                           | 847.5           | 15            | 0      | 20         | 3.3           | 3.290            | 0.0039                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -0.916           | -0.0011               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -2.947           | -0.0035               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -4.663           | -0.0055               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -6.695           | -0.0079               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -7.153           | -0.0084               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -7.038           | -0.0083               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -5.808           | -0.0069               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -7.467           | -0.0088               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -7.238           | -0.0085               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -7.267           | -0.0086               | -2.5 to 2.5 | Pass    |
| 16QAM                     | 825.5           | 15            | 0      | 20         | 3.3           | -38.238          | -0.0463               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -42.114          | -0.0510               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -43.774          | -0.0530               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -45.662          | -0.0553               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -48.094          | -0.0583               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -1.674           | -0.0020               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -3.333           | -0.0040               | -2.5 to 2.5 | Pass    |

|  |       |    |   |     |     |        |         |             |      |
|--|-------|----|---|-----|-----|--------|---------|-------------|------|
|  |       |    |   | 10  | 3.6 | -4.807 | -0.0058 | -2.5 to 2.5 | Pass |
|  |       |    |   | 30  | 3.6 | -7.296 | -0.0088 | -2.5 to 2.5 | Pass |
|  |       |    |   | 40  | 3.6 | -8.612 | -0.0104 | -2.5 to 2.5 | Pass |
|  |       |    |   | 50  | 3.6 | -9.699 | -0.0117 | -2.5 to 2.5 | Pass |
|  | 836.5 | 15 | 0 | 20  | 3.3 | -5.322 | -0.0064 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 3.6 | -6.652 | -0.0080 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 4.2 | -6.723 | -0.0080 | -2.5 to 2.5 | Pass |
|  |       |    |   | -30 | 3.6 | -7.153 | -0.0086 | -2.5 to 2.5 | Pass |
|  |       |    |   | -20 | 3.6 | -7.353 | -0.0088 | -2.5 to 2.5 | Pass |
|  |       |    |   | -10 | 3.6 | -6.437 | -0.0077 | -2.5 to 2.5 | Pass |
|  |       |    |   | 0   | 3.6 | -7.138 | -0.0085 | -2.5 to 2.5 | Pass |
|  |       |    |   | 10  | 3.6 | -8.726 | -0.0104 | -2.5 to 2.5 | Pass |
|  |       |    |   | 30  | 3.6 | -8.512 | -0.0102 | -2.5 to 2.5 | Pass |
|  |       |    |   | 40  | 3.6 | -7.467 | -0.0089 | -2.5 to 2.5 | Pass |
|  |       |    |   | 50  | 3.6 | -8.783 | -0.0105 | -2.5 to 2.5 | Pass |
|  | 847.5 | 15 | 0 | 20  | 3.3 | -7.095 | -0.0084 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 3.6 | -7.224 | -0.0085 | -2.5 to 2.5 | Pass |
|  |       |    |   |     | 4.2 | -6.037 | -0.0071 | -2.5 to 2.5 | Pass |
|  |       |    |   | -30 | 3.6 | -4.778 | -0.0056 | -2.5 to 2.5 | Pass |
|  |       |    |   | -20 | 3.6 | -6.738 | -0.0080 | -2.5 to 2.5 | Pass |
|  |       |    |   | -10 | 3.6 | -6.251 | -0.0074 | -2.5 to 2.5 | Pass |
|  |       |    |   | 0   | 3.6 | -6.394 | -0.0075 | -2.5 to 2.5 | Pass |
|  |       |    |   | 10  | 3.6 | -7.510 | -0.0089 | -2.5 to 2.5 | Pass |
|  |       |    |   | 30  | 3.6 | -7.195 | -0.0085 | -2.5 to 2.5 | Pass |
|  |       |    |   | 40  | 3.6 | -6.394 | -0.0075 | -2.5 to 2.5 | Pass |
|  |       |    |   | 50  | 3.6 | -7.153 | -0.0084 | -2.5 to 2.5 | Pass |

## 7.3 B5\_5MHz

### 7.3.1 Test Result

| Band: 5 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 826.5           | 25            | 0      | 20         | 3.3           | 14.305           | 0.0173                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 8.082            | 0.0098                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 6.294            | 0.0076                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 5.407            | 0.0065                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | 6.752            | 0.0082                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | 6.595            | 0.0080                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | 8.240            | 0.0100                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | 8.640            | 0.0105                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | 10.242           | 0.0124                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | 9.928            | 0.0120                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | 10.643           | 0.0129                | -2.5 to 2.5 | Pass    |
|                           | 836.5           | 25            | 0      | 20         | 3.3           | 5.693            | 0.0068                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 5.479            | 0.0065                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 4.134            | 0.0049                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 3.748            | 0.0045                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | 2.646            | 0.0032                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | 2.947            | 0.0035                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | 2.103            | 0.0025                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | 2.289            | 0.0027                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | 2.732            | 0.0033                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | 2.217            | 0.0027                | -2.5 to 2.5 | Pass    |

|       |       |    |   |     |     |        |         |             |      |
|-------|-------|----|---|-----|-----|--------|---------|-------------|------|
|       | 846.5 | 25 | 0 | 50  | 3.6 | 2.947  | 0.0035  | -2.5 to 2.5 | Pass |
|       |       |    |   | 20  | 3.3 | 6.409  | 0.0076  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 3.605  | 0.0043  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 3.033  | 0.0036  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 4.635  | 0.0055  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 6.938  | 0.0082  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 8.755  | 0.0103  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 11.430 | 0.0135  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 13.776 | 0.0163  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 15.106 | 0.0178  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 17.509 | 0.0207  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 18.840 | 0.0223  | -2.5 to 2.5 | Pass |
| 16QAM | 826.5 | 25 | 0 | 20  | 3.3 | 11.659 | 0.0141  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 11.759 | 0.0142  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 13.633 | 0.0165  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 13.676 | 0.0165  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 13.947 | 0.0169  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 12.918 | 0.0156  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 13.175 | 0.0159  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 13.289 | 0.0161  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 14.005 | 0.0169  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 13.204 | 0.0160  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 13.247 | 0.0160  | -2.5 to 2.5 | Pass |
|       | 836.5 | 25 | 0 | 20  | 3.3 | 2.775  | 0.0033  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 3.304  | 0.0039  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 2.146  | 0.0026  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 0.973  | 0.0012  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 1.431  | 0.0017  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 1.044  | 0.0012  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | -0.973 | -0.0012 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | -1.087 | -0.0013 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | -1.016 | -0.0012 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | -2.604 | -0.0031 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | -2.403 | -0.0029 | -2.5 to 2.5 | Pass |
|       | 846.5 | 25 | 0 | 20  | 3.3 | 20.342 | 0.0240  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 22.488 | 0.0266  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 24.176 | 0.0286  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 24.719 | 0.0292  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 24.490 | 0.0289  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 25.306 | 0.0299  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 25.964 | 0.0307  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 26.422 | 0.0312  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 26.236 | 0.0310  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 27.137 | 0.0321  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 25.363 | 0.0300  | -2.5 to 2.5 | Pass |

## 7.4 B5\_10MHz

### 7.4.1 Test Result

| Band: 5 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 829             | 50            | 0      | 20         | 3.3           | 11.959           | 0.0144                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 3.633            | 0.0044                | -2.5 to 2.5 | Pass    |

|       |       |    |   |     |     |        |         |             |      |
|-------|-------|----|---|-----|-----|--------|---------|-------------|------|
|       |       |    |   |     | 4.2 | 2.918  | 0.0035  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 3.676  | 0.0044  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 5.565  | 0.0067  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 8.554  | 0.0103  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 8.869  | 0.0107  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 10.700 | 0.0129  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 11.516 | 0.0139  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 14.005 | 0.0169  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 14.062 | 0.0170  | -2.5 to 2.5 | Pass |
|       | 836.5 | 50 | 0 | 20  | 3.3 | 9.313  | 0.0111  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 6.280  | 0.0075  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 5.579  | 0.0067  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 5.894  | 0.0070  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 5.994  | 0.0072  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 6.237  | 0.0075  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 7.353  | 0.0088  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 6.852  | 0.0082  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 7.424  | 0.0089  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 7.596  | 0.0091  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 6.623  | 0.0079  | -2.5 to 2.5 | Pass |
|       | 844   | 50 | 0 | 20  | 3.3 | 7.124  | 0.0084  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 3.462  | 0.0041  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 5.894  | 0.0070  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 11.001 | 0.0130  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 15.907 | 0.0188  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 19.255 | 0.0228  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 23.189 | 0.0275  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 27.151 | 0.0322  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 30.799 | 0.0365  | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | 32.816 | 0.0389  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 35.763 | 0.0424  | -2.5 to 2.5 | Pass |
| 16QAM | 829   | 50 | 0 | 20  | 3.3 | 15.435 | 0.0186  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 16.479 | 0.0199  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 17.037 | 0.0206  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 16.394 | 0.0198  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 15.693 | 0.0189  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 15.907 | 0.0192  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | 14.906 | 0.0180  | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | 14.019 | 0.0169  | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | 14.133 | 0.0170  | -2.5 to 2.5 | Pass |
|       | 836.5 | 50 | 0 | 40  | 3.6 | 13.719 | 0.0165  | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | 13.733 | 0.0166  | -2.5 to 2.5 | Pass |
|       |       |    |   | 20  | 3.3 | 5.336  | 0.0064  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 5.994  | 0.0072  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 4.892  | 0.0058  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 2.990  | 0.0036  | -2.5 to 2.5 | Pass |
|       |       |    |   | -20 | 3.6 | 1.788  | 0.0021  | -2.5 to 2.5 | Pass |
|       |       |    |   | -10 | 3.6 | 0.615  | 0.0007  | -2.5 to 2.5 | Pass |
|       |       |    |   | 0   | 3.6 | -0.873 | -0.0010 | -2.5 to 2.5 | Pass |
|       |       |    |   | 10  | 3.6 | -0.858 | -0.0010 | -2.5 to 2.5 | Pass |
|       |       |    |   | 30  | 3.6 | -1.059 | -0.0013 | -2.5 to 2.5 | Pass |
|       |       |    |   | 40  | 3.6 | -2.403 | -0.0029 | -2.5 to 2.5 | Pass |
|       |       |    |   | 50  | 3.6 | -3.061 | -0.0037 | -2.5 to 2.5 | Pass |
|       | 844   | 50 | 0 | 20  | 3.3 | 39.053 | 0.0463  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 3.6 | 42.014 | 0.0498  | -2.5 to 2.5 | Pass |
|       |       |    |   |     | 4.2 | 42.315 | 0.0501  | -2.5 to 2.5 | Pass |
|       |       |    |   | -30 | 3.6 | 42.114 | 0.0499  | -2.5 to 2.5 | Pass |

|  |  |  |  |     |     |        |        |             |      |
|--|--|--|--|-----|-----|--------|--------|-------------|------|
|  |  |  |  | -20 | 3.6 | 41.313 | 0.0489 | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.6 | 40.970 | 0.0485 | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.6 | 40.684 | 0.0482 | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.6 | 40.841 | 0.0484 | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.6 | 41.084 | 0.0487 | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.6 | 42.243 | 0.0501 | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.6 | 42.644 | 0.0505 | -2.5 to 2.5 | Pass |

## 8. Frequency Stability

### 8.1 B7\_5MHz

#### 8.1.1 Test Result

| Band: 7 / Bandwidth: 5MHz |                 |               |        |            |               |                  |                       |             |         |
|---------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                           |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                      | 2502.5          | 25            | 0      | 20         | 3.3           | -1.316           | -0.0005               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -6.037           | -0.0024               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -15.578          | -0.0062               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -22.073          | -0.0088               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -23.789          | -0.0095               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | -22.902          | -0.0092               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | -21.415          | -0.0086               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | -17.037          | -0.0068               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | -13.146          | -0.0053               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -7.353           | -0.0029               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | -0.229           | -0.0001               | -2.5 to 2.5 | Pass    |
|                           | 2535            | 25            | 0      | 20         | 3.3           | 24.705           | 0.0097                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 27.351           | 0.0108                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 28.081           | 0.0111                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 23.847           | 0.0094                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | 21.572           | 0.0085                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | 19.512           | 0.0077                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | 16.751           | 0.0066                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | 14.791           | 0.0058                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | 11.530           | 0.0045                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | 7.653            | 0.0030                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | 7.839            | 0.0031                | -2.5 to 2.5 | Pass    |
|                           | 2567.5          | 25            | 0      | 20         | 3.3           | 0.544            | 0.0002                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | -3.605           | -0.0014               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | -8.297           | -0.0032               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | -11.902          | -0.0046               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -20        | 3.6           | -7.281           | -0.0028               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -10        | 3.6           | 0.229            | 0.0001                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 0          | 3.6           | 10.057           | 0.0039                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 10         | 3.6           | 20.442           | 0.0080                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 30         | 3.6           | 32.387           | 0.0126                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 40         | 3.6           | -5.722           | -0.0022               | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | 50         | 3.6           | 1.359            | 0.0005                | -2.5 to 2.5 | Pass    |
| 16QAM                     | 2502.5          | 25            | 0      | 20         | 3.3           | 5.264            | 0.0021                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 3.6           | 11.544           | 0.0046                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        |            | 4.2           | 19.441           | 0.0078                | -2.5 to 2.5 | Pass    |
|                           |                 |               |        | -30        | 3.6           | 21.658           | 0.0087                | -2.5 to 2.5 | Pass    |

|  |        |    |   |     |     |         |         |             |      |
|--|--------|----|---|-----|-----|---------|---------|-------------|------|
|  |        |    |   | -20 | 3.6 | 26.364  | 0.0105  | -2.5 to 2.5 | Pass |
|  |        |    |   | -10 | 3.6 | 28.110  | 0.0112  | -2.5 to 2.5 | Pass |
|  |        |    |   | 0   | 3.6 | 33.002  | 0.0132  | -2.5 to 2.5 | Pass |
|  |        |    |   | 10  | 3.6 | 37.494  | 0.0150  | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | 39.797  | 0.0159  | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | 6.194   | 0.0025  | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | 8.054   | 0.0032  | -2.5 to 2.5 | Pass |
|  | 2535   | 25 | 0 | 20  | 3.3 | 4.849   | 0.0019  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 3.6 | 4.935   | 0.0019  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 4.2 | 5.164   | 0.0020  | -2.5 to 2.5 | Pass |
|  |        |    |   | -30 | 3.6 | 1.531   | 0.0006  | -2.5 to 2.5 | Pass |
|  |        |    |   | -20 | 3.6 | -1.774  | -0.0007 | -2.5 to 2.5 | Pass |
|  |        |    |   | -10 | 3.6 | -1.631  | -0.0006 | -2.5 to 2.5 | Pass |
|  |        |    |   | 0   | 3.6 | -4.964  | -0.0020 | -2.5 to 2.5 | Pass |
|  |        |    |   | 10  | 3.6 | -7.281  | -0.0029 | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | -8.841  | -0.0035 | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | -10.486 | -0.0041 | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | -12.259 | -0.0048 | -2.5 to 2.5 | Pass |
|  |        |    |   | 20  | 3.3 | 17.524  | 0.0068  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 3.6 | 31.128  | 0.0121  | -2.5 to 2.5 | Pass |
|  |        |    |   |     | 4.2 | 41.442  | 0.0161  | -2.5 to 2.5 | Pass |
|  | 2567.5 | 25 | 0 | -30 | 3.6 | 35.634  | 0.0139  | -2.5 to 2.5 | Pass |
|  |        |    |   | -20 | 3.6 | 10.557  | 0.0041  | -2.5 to 2.5 | Pass |
|  |        |    |   | -10 | 3.6 | 19.956  | 0.0078  | -2.5 to 2.5 | Pass |
|  |        |    |   | 0   | 3.6 | 26.107  | 0.0102  | -2.5 to 2.5 | Pass |
|  |        |    |   | 10  | 3.6 | 34.275  | 0.0133  | -2.5 to 2.5 | Pass |
|  |        |    |   | 30  | 3.6 | 1.945   | 0.0008  | -2.5 to 2.5 | Pass |
|  |        |    |   | 40  | 3.6 | 6.895   | 0.0027  | -2.5 to 2.5 | Pass |
|  |        |    |   | 50  | 3.6 | 12.631  | 0.0049  | -2.5 to 2.5 | Pass |

## 8.2 B7\_10MHz

### 8.2.1 Test Result

| Band: 7 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 2505            | 50            | 0      | 20         | 3.3           | 18.082           | 0.0072                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 0.243            | 0.0001                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -6.237           | -0.0025               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -0.672           | -0.0003               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 10.757           | 0.0043                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 24.505           | 0.0098                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 38.266           | 0.0153                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 21.229           | 0.0085                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 36.292           | 0.0145                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 2.260            | 0.0009                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 20.528           | 0.0082                | -2.5 to 2.5 | Pass    |
|                            | 2535            | 50            | 0      | 20         | 3.3           | 0.243            | 0.0001                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -1.287           | -0.0005               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -13.046          | -0.0051               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -21.729          | -0.0086               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -30.656          | -0.0121               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -38.066          | -0.0150               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -39.740          | -0.0157               | -2.5 to 2.5 | Pass    |

|       |      |    |   |     |     |         |         |             |      |
|-------|------|----|---|-----|-----|---------|---------|-------------|------|
|       | 2565 | 50 | 0 | 10  | 3.6 | 9.985   | 0.0039  | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 3.204   | 0.0013  | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | -1.731  | -0.0007 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -5.765  | -0.0023 | -2.5 to 2.5 | Pass |
|       |      |    |   | 20  | 3.3 | 12.116  | 0.0047  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | 2.875   | 0.0011  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | 3.748   | 0.0015  | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | 15.764  | 0.0061  | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | 32.258  | 0.0126  | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | 27.452  | 0.0107  | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | 41.642  | 0.0162  | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | 8.111   | 0.0032  | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 32.458  | 0.0127  | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | 19.712  | 0.0077  | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | 44.932  | 0.0175  | -2.5 to 2.5 | Pass |
| 16QAM | 2505 | 50 | 0 | 20  | 3.3 | 38.109  | 0.0152  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | 40.140  | 0.0160  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | 32.201  | 0.0129  | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | 41.757  | 0.0167  | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | 46.749  | 0.0187  | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | 47.607  | 0.0190  | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | 21.358  | 0.0085  | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | 26.979  | 0.0108  | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 30.813  | 0.0123  | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | 36.063  | 0.0144  | -2.5 to 2.5 | Pass |
|       | 2535 | 50 | 0 | 50  | 3.6 | 42.672  | 0.0170  | -2.5 to 2.5 | Pass |
|       |      |    |   | 20  | 3.3 | -10.500 | -0.0041 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | -10.099 | -0.0040 | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | -14.920 | -0.0059 | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | -20.328 | -0.0080 | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | -26.765 | -0.0106 | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | -31.157 | -0.0123 | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | -36.321 | -0.0143 | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | -34.747 | -0.0137 | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | -10.014 | -0.0040 | -2.5 to 2.5 | Pass |
|       | 2565 | 50 | 0 | 40  | 3.6 | -15.521 | -0.0061 | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | -21.214 | -0.0084 | -2.5 to 2.5 | Pass |
|       |      |    |   | 20  | 3.3 | 7.410   | 0.0029  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 3.6 | 29.669  | 0.0116  | -2.5 to 2.5 | Pass |
|       |      |    |   |     | 4.2 | 13.847  | 0.0054  | -2.5 to 2.5 | Pass |
|       |      |    |   | -30 | 3.6 | 12.417  | 0.0048  | -2.5 to 2.5 | Pass |
|       |      |    |   | -20 | 3.6 | 22.573  | 0.0088  | -2.5 to 2.5 | Pass |
|       |      |    |   | -10 | 3.6 | 31.815  | 0.0124  | -2.5 to 2.5 | Pass |
|       |      |    |   | 0   | 3.6 | 39.053  | 0.0152  | -2.5 to 2.5 | Pass |
|       |      |    |   | 10  | 3.6 | 49.524  | 0.0193  | -2.5 to 2.5 | Pass |
|       |      |    |   | 30  | 3.6 | 20.900  | 0.0081  | -2.5 to 2.5 | Pass |
|       |      |    |   | 40  | 3.6 | 15.936  | 0.0062  | -2.5 to 2.5 | Pass |
|       |      |    |   | 50  | 3.6 | 23.289  | 0.0091  | -2.5 to 2.5 | Pass |

## 8.3 B7\_15MHz

### 8.3.1 Test Result

| Band: 7 / Bandwidth: 15MHz |           |               |       |         |             |                       |         |
|----------------------------|-----------|---------------|-------|---------|-------------|-----------------------|---------|
| Modulation                 | Frequency | RB Allocation | Temp. | Voltage | Freq. Error | Freq. vs. Rated (ppm) | Verdict |

|       | (MHz)  | Size | Offset | (°C) | (VDC) | (Hz)    | Result  | Limit       |      |
|-------|--------|------|--------|------|-------|---------|---------|-------------|------|
| QPSK  | 2507.5 | 75   | 0      | 20   | 3.3   | 20.528  | 0.0082  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 3.6   | -0.815  | -0.0003 | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 4.2   | -3.104  | -0.0012 | -2.5 to 2.5 | Pass |
|       |        |      |        | -30  | 3.6   | 4.621   | 0.0018  | -2.5 to 2.5 | Pass |
|       |        |      |        | -20  | 3.6   | 20.585  | 0.0082  | -2.5 to 2.5 | Pass |
|       |        |      |        | -10  | 3.6   | 17.338  | 0.0069  | -2.5 to 2.5 | Pass |
|       |        |      |        | 0    | 3.6   | 16.265  | 0.0065  | -2.5 to 2.5 | Pass |
|       |        |      |        | 10   | 3.6   | 36.349  | 0.0145  | -2.5 to 2.5 | Pass |
|       |        |      |        | 30   | 3.6   | 28.653  | 0.0114  | -2.5 to 2.5 | Pass |
|       |        |      |        | 40   | 3.6   | 18.597  | 0.0074  | -2.5 to 2.5 | Pass |
|       |        |      |        | 50   | 3.6   | 7.854   | 0.0031  | -2.5 to 2.5 | Pass |
|       | 2535   | 75   | 0      | 20   | 3.3   | 12.074  | 0.0048  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 3.6   | 2.832   | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 4.2   | -8.039  | -0.0032 | -2.5 to 2.5 | Pass |
|       |        |      |        | -30  | 3.6   | -23.589 | -0.0093 | -2.5 to 2.5 | Pass |
|       |        |      |        | -20  | 3.6   | -36.621 | -0.0144 | -2.5 to 2.5 | Pass |
|       |        |      |        | -10  | 3.6   | -48.995 | -0.0193 | -2.5 to 2.5 | Pass |
|       |        |      |        | 0    | 3.6   | 1.044   | 0.0004  | -2.5 to 2.5 | Pass |
|       |        |      |        | 10   | 3.6   | -8.783  | -0.0035 | -2.5 to 2.5 | Pass |
|       |        |      |        | 30   | 3.6   | -15.092 | -0.0060 | -2.5 to 2.5 | Pass |
|       |        |      |        | 40   | 3.6   | -19.183 | -0.0076 | -2.5 to 2.5 | Pass |
|       |        |      |        | 50   | 3.6   | -30.527 | -0.0120 | -2.5 to 2.5 | Pass |
|       | 2562.5 | 75   | 0      | 20   | 3.3   | 2.904   | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 3.6   | -9.527  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 4.2   | -9.484  | -0.0037 | -2.5 to 2.5 | Pass |
|       |        |      |        | -30  | 3.6   | 6.938   | 0.0027  | -2.5 to 2.5 | Pass |
|       |        |      |        | -20  | 3.6   | 28.467  | 0.0111  | -2.5 to 2.5 | Pass |
|       |        |      |        | -10  | 3.6   | 22.001  | 0.0086  | -2.5 to 2.5 | Pass |
|       |        |      |        | 0    | 3.6   | 23.160  | 0.0090  | -2.5 to 2.5 | Pass |
|       |        |      |        | 10   | 3.6   | 27.823  | 0.0109  | -2.5 to 2.5 | Pass |
|       |        |      |        | 30   | 3.6   | 35.734  | 0.0139  | -2.5 to 2.5 | Pass |
|       |        |      |        | 40   | 3.6   | 43.101  | 0.0168  | -2.5 to 2.5 | Pass |
| 16QAM | 2507.5 | 75   | 0      | 20   | 3.3   | 30.584  | 0.0122  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 3.6   | 24.419  | 0.0097  | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 4.2   | 30.313  | 0.0121  | -2.5 to 2.5 | Pass |
|       |        |      |        | -30  | 3.6   | 27.423  | 0.0109  | -2.5 to 2.5 | Pass |
|       |        |      |        | -20  | 3.6   | -0.730  | -0.0003 | -2.5 to 2.5 | Pass |
|       |        |      |        | -10  | 3.6   | 7.353   | 0.0029  | -2.5 to 2.5 | Pass |
|       |        |      |        | 0    | 3.6   | 16.179  | 0.0065  | -2.5 to 2.5 | Pass |
|       |        |      |        | 10   | 3.6   | 25.792  | 0.0103  | -2.5 to 2.5 | Pass |
|       |        |      |        | 30   | 3.6   | 36.650  | 0.0146  | -2.5 to 2.5 | Pass |
|       |        |      |        | 40   | 3.6   | 46.091  | 0.0184  | -2.5 to 2.5 | Pass |
|       |        |      |        | 50   | 3.6   | 27.666  | 0.0110  | -2.5 to 2.5 | Pass |
|       | 2535   | 75   | 0      | 20   | 3.3   | -38.681 | -0.0153 | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 3.6   | -42.415 | -0.0167 | -2.5 to 2.5 | Pass |
|       |        |      |        |      | 4.2   | -38.624 | -0.0152 | -2.5 to 2.5 | Pass |
|       |        |      |        | -30  | 3.6   | -23.718 | -0.0094 | -2.5 to 2.5 | Pass |
|       |        |      |        | -20  | 3.6   | -33.760 | -0.0133 | -2.5 to 2.5 | Pass |
|       |        |      |        | -10  | 3.6   | -46.434 | -0.0183 | -2.5 to 2.5 | Pass |
|       |        |      |        | 0    | 3.6   | 1.273   | 0.0005  | -2.5 to 2.5 | Pass |
|       |        |      |        | 10   | 3.6   | -7.668  | -0.0030 | -2.5 to 2.5 | Pass |
|       |        |      |        | 30   | 3.6   | -14.834 | -0.0059 | -2.5 to 2.5 | Pass |
|       |        |      |        | 40   | 3.6   | -23.861 | -0.0094 | -2.5 to 2.5 | Pass |
|       |        |      |        | 50   | 3.6   | -35.191 | -0.0139 | -2.5 to 2.5 | Pass |
|       | 2562.5 | 75   | 0      | 20   | 3.3   | 37.351  | 0.0146  | -2.5 to 2.5 | Pass |

|  |  |  |  |     |     |        |         |             |      |
|--|--|--|--|-----|-----|--------|---------|-------------|------|
|  |  |  |  |     | 3.6 | -0.215 | -0.0001 | -2.5 to 2.5 | Pass |
|  |  |  |  |     | 4.2 | 17.667 | 0.0069  | -2.5 to 2.5 | Pass |
|  |  |  |  | -30 | 3.6 | 30.141 | 0.0118  | -2.5 to 2.5 | Pass |
|  |  |  |  | -20 | 3.6 | 3.977  | 0.0016  | -2.5 to 2.5 | Pass |
|  |  |  |  | -10 | 3.6 | 11.215 | 0.0044  | -2.5 to 2.5 | Pass |
|  |  |  |  | 0   | 3.6 | 21.529 | 0.0084  | -2.5 to 2.5 | Pass |
|  |  |  |  | 10  | 3.6 | 25.978 | 0.0101  | -2.5 to 2.5 | Pass |
|  |  |  |  | 30  | 3.6 | 37.894 | 0.0148  | -2.5 to 2.5 | Pass |
|  |  |  |  | 40  | 3.6 | 2.732  | 0.0011  | -2.5 to 2.5 | Pass |
|  |  |  |  | 50  | 3.6 | 16.222 | 0.0063  | -2.5 to 2.5 | Pass |

## 8.4 B7\_20MHz

### 8.4.1 Test Result

| Band: 7 / Bandwidth: 20MHz |                 |               |        |            |               |                  |                       |             |         |
|----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                 | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                       | 2510            | 100           | 0      | 20         | 3.3           | 4.134            | 0.0016                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -41.842          | -0.0167               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -38.438          | -0.0153               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -15.907          | -0.0063               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 20.828           | 0.0083                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 26.007           | 0.0104                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 22.359           | 0.0089                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 21.272           | 0.0085                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 27.294           | 0.0109                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 24.977           | 0.0100                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 6.495            | 0.0026                | -2.5 to 2.5 | Pass    |
|                            | 2535            | 100           | 0      | 20         | 3.3           | 15.850           | 0.0063                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | -6.166           | -0.0024               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | -31.857          | -0.0126               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | -4.292           | -0.0017               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | -20.142          | -0.0079               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | -38.109          | -0.0150               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | -6.166           | -0.0024               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | -6.552           | -0.0026               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | -16.665          | -0.0066               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | -23.203          | -0.0092               | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | -22.717          | -0.0090               | -2.5 to 2.5 | Pass    |
|                            | 2560            | 100           | 0      | 20         | 3.3           | 10.757           | 0.0042                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 0.300            | 0.0001                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 23.146           | 0.0090                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 27.308           | 0.0107                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -20        | 3.6           | 19.183           | 0.0075                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -10        | 3.6           | 7.682            | 0.0030                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 0          | 3.6           | 27.394           | 0.0107                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 10         | 3.6           | 16.065           | 0.0063                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 30         | 3.6           | 31.056           | 0.0121                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 40         | 3.6           | 7.381            | 0.0029                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | 50         | 3.6           | 35.605           | 0.0139                | -2.5 to 2.5 | Pass    |
| 16QAM                      | 2510            | 100           | 0      | 20         | 3.3           | 34.847           | 0.0139                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 3.6           | 20.599           | 0.0082                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        |            | 4.2           | 33.088           | 0.0132                | -2.5 to 2.5 | Pass    |
|                            |                 |               |        | -30        | 3.6           | 41.542           | 0.0166                | -2.5 to 2.5 | Pass    |

|  |      |     |   |     |     |         |         |             |      |
|--|------|-----|---|-----|-----|---------|---------|-------------|------|
|  |      |     |   | -20 | 3.6 | -13.719 | -0.0055 | -2.5 to 2.5 | Pass |
|  |      |     |   | -10 | 3.6 | -9.584  | -0.0038 | -2.5 to 2.5 | Pass |
|  |      |     |   | 0   | 3.6 | -4.320  | -0.0017 | -2.5 to 2.5 | Pass |
|  |      |     |   | 10  | 3.6 | -1.130  | -0.0005 | -2.5 to 2.5 | Pass |
|  |      |     |   | 30  | 3.6 | 4.864   | 0.0019  | -2.5 to 2.5 | Pass |
|  |      |     |   | 40  | 3.6 | 12.689  | 0.0051  | -2.5 to 2.5 | Pass |
|  |      |     |   | 50  | 3.6 | 20.156  | 0.0080  | -2.5 to 2.5 | Pass |
|  | 2535 | 100 | 0 | 20  | 3.3 | -23.475 | -0.0093 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 3.6 | -31.042 | -0.0122 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 4.2 | -34.704 | -0.0137 | -2.5 to 2.5 | Pass |
|  |      |     |   | -30 | 3.6 | -26.250 | -0.0104 | -2.5 to 2.5 | Pass |
|  |      |     |   | -20 | 3.6 | -25.191 | -0.0099 | -2.5 to 2.5 | Pass |
|  |      |     |   | -10 | 3.6 | -22.717 | -0.0090 | -2.5 to 2.5 | Pass |
|  |      |     |   | 0   | 3.6 | -40.956 | -0.0162 | -2.5 to 2.5 | Pass |
|  |      |     |   | 10  | 3.6 | -15.421 | -0.0061 | -2.5 to 2.5 | Pass |
|  |      |     |   | 30  | 3.6 | -30.098 | -0.0119 | -2.5 to 2.5 | Pass |
|  |      |     |   | 40  | 3.6 | -45.562 | -0.0180 | -2.5 to 2.5 | Pass |
|  |      |     |   | 50  | 3.6 | -6.208  | -0.0024 | -2.5 to 2.5 | Pass |
|  | 2560 | 100 | 0 | 20  | 3.3 | 30.055  | 0.0117  | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 3.6 | -4.663  | -0.0018 | -2.5 to 2.5 | Pass |
|  |      |     |   |     | 4.2 | 14.648  | 0.0057  | -2.5 to 2.5 | Pass |
|  |      |     |   | -30 | 3.6 | 23.460  | 0.0092  | -2.5 to 2.5 | Pass |
|  |      |     |   | -20 | 3.6 | 32.387  | 0.0127  | -2.5 to 2.5 | Pass |
|  |      |     |   | -10 | 3.6 | 38.309  | 0.0150  | -2.5 to 2.5 | Pass |
|  |      |     |   | 0   | 3.6 | 30.899  | 0.0121  | -2.5 to 2.5 | Pass |
|  |      |     |   | 10  | 3.6 | 11.916  | 0.0047  | -2.5 to 2.5 | Pass |
|  |      |     |   | 30  | 3.6 | 18.368  | 0.0072  | -2.5 to 2.5 | Pass |
|  |      |     |   | 40  | 3.6 | 28.439  | 0.0111  | -2.5 to 2.5 | Pass |
|  |      |     |   | 50  | 3.6 | 37.937  | 0.0148  | -2.5 to 2.5 | Pass |